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ABSTRACT

This teacher's guide is intended for use in helping Kodak Corporation employees develop the basic reading skills required in their workplace. The following topics are covered in the individual modules: identifying and summarizing key ideas; mastering four techniques for accessing information (i.e., skimming, scanning, sequencing, and identifying a text's organizational structure); and using and understanding graphically displayed material. Each module includes some or all of the following: objectives, materials and guidelines for direct instruction, transparency masters, reading materials and accompanying learning activities and answer sheets, and a self-assessment instrument. strategies, and a pretest and posttest. Transparency masters and student worksheets are included. (MN)

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School of Occupational and Educational Studies
ADULT EDUCATION PROGRAM
Bart P. Beaudin, Program Chair
Report No. AEP-93-03

College of Applied Human Sciences

ED 361 469

Kodak Skills Enhancement Program Curriculum:

Applying Written Information in the Workplace

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January 22, 1993

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CE 064 235

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KODAK SKILLS ENHANCEMENT PROGRAM

KODAK COLORADO DIVISION
Windsor, Colorado

APPLYING WRITTEN INFORMATION IN THE WORKPLACE

APPLYING WRITTEN INFORMATION IN THE WORKPLACE

Employees at Kodak Colorado Division are expected to perform a variety of tasks that require the application of good written information skills. Identifying the main action in directions, summarizing written information, making decisions quickly on written material concerning various job-related activities, visual representation of the work area for training purposes, identifying critical components in instructions, and using and understanding graphically displayed graphs and charts are all examples of these skills.

There are many skills involved in effectively transmitting written information that must be used collaboratively. Among these are the ability to employ:

* skimming
* scanning
* sequencing
* systems organization
* forming checksheets, control charts, and cause-and-effect diagrams
* percentages

The realities of time availability and complex work schedules provide a challenge in delivering learning experiences that upgrade all of these skills.

These three modules address employee skills enhancement needs by providing essential information and instruction, appropriate practice and application, and resources for further directed learning in the application of written information in the workplace.

KODAK SKILLS ENHANCEMENT PROGRAM
APPLYING WRITTEN INFORMATION IN THE WORKPLACE

CUSTOMIZING THE CURRICULUM

Please help us customize the curriculum to meet your workplace needs by bringing samples of some of the following workplace materials to the next class meeting.

In any case where there is both a filled out form and a blank form of any of type of material, please bring in both forms. Feel free to white out names.

AMTs (Analytical Method of Training)
Training materials
Schedule reports, print outs
Shopfloor information
Label information

SOP's (Stanadard Operating Procedures)
Changes in procedures
ISO procedures
MRPII procedures
STR's (Special Test Requests)

Profs (Professional Office System)
Memo - positive and negative
E Mail print outs
SQPs (Standard Quality Procedures)
Job Postings
Waste Reports

Departmental Procedures
IA's (Informal Appraisals)
Employee Benefit information
MCI Logs (Maching Control Inspection)
QIR's (Quality Incident Forms)
Suggestions sheet

Charts, graphs, indexes
Pareto diagrams, bar graphs
SPC Charts, fishbone diagrams
Schematics
Flow charts

Peer evaluation forms
Engineering change orders
Quality stories
Daily logs, shift reports
Activity reports

Matrices
Special notices
CAG's (Corrective Action Guidelines)
PDR's (Process Deviation Reports)

PAC's (Red book)
IMS,AMAPS (Computer Systems)
Meeting notes
Bill of Materials
Newsletters
Equipment Log books

Drafting manual
Machine Design Manual
Facilities work request
Shopfloor materials lists, parameters, holds
ABC Guides (Testing)

Slitter Logs
Shopfloor screen information
Bulletin board notices
End of shift notes
Production logs
Summaries for quality audits

EMPPLANS of Profs
Profs or software tutorials
Maintenance Logs
OM (Organizational Memorandum)
PPA (Physical Product Advisor)
Visi-Qual - Exception Reporting

Safety tour forms
Performance Appraisals
Improvement Projects For
CIT forms
Deviation Reports
Shift change notices

Organizational Matices
Team Procedure Documentation
TARIFFS
MIPs (Maintenance Inspection Procedures)
SOL's (Standard Operating Procedures)

SML's (Support Manufacturing Letters)
OASIS
DR's (Deviation Reports)
PIP's (Personal Improvement Plans)

Work individually **LB1.6, LB1.7**

Have participants choose from three AMT pages or do all if time - Remember, not all info on AMT sheets is directive. Some is supplementary info. Have participants locate only the procedural directions to mark. **LB1.8**

Report out or let individuals mark the transparencies for the class. **T1.5,T1.6 T1.7**

WRITING JOB AIDS WITH CRITICAL COMPONENTS

With group input, fill in WHO WHAT WHERE overhead (corresponds to LB1.9) using content from LB1.4. **T1.8**

Individual work with form LB1.9 using content from LB1.5 Process **LB1.9**

Write job aids on plain paper using content from LB1.6, LB1.7 and LB1.8

PART II: IDENTIFYING AND SUMMARIZING KEY IDEAS IN PARAGRAPHS

Model summarizing paragraph **T1.9 (LB1.10)**

Small group work - process **LB1.11**

Divide "Sheet Film's Journey" articles evenly within teams of four to summarize cooperatively **LB1.12**

Independent work **LB1.13**

REVIEW/CLOSURE

Include future logistics and gathering functional context materials

KODAK SKILLS ENHANCEMENT PROGRAM

APPLYING WRITTEN INFORMATION IN THE WORKPLACE

MODULE I: ORIENTATION/IDENTIFYING AND SUMMARIZING KEY IDEAS

ORIENTATION

INTRODUCTIONS & ICEBREAKER ACTIVITY

ORIENTATION OBJECTIVES AND OVERVIEW OF COURSE **T1.1 (LB1.1)** **T1.2 (LB1.2)**

Include group discussion of changes in jobs, job requirements, future changes, reason for signing up for class/upgrading, etc.

NORMS AND EXPECTATIONS

(SHORT ASSESSMENT)

SOLICIT HELP IN GATHERING FUNCTIONAL CONTEXT MATERIALS
Pass out lists, have them initial master list (?)

IDENTIFYING AND SUMMARIZING KEY IDEAS

PART I: IDENTIFYING AND SUMMARIZING KEY COMPONENTS IN PROCEDURAL DIRECTIONS

Present objectives **T1.3 (LB1.3)**

Have participants summarize jobs

Model ACTION, OBJECT, SUPPORTING INFO process **T1.4 (LB1.4)**
(Main action is not always main verb)
('Object' is not always object 'part of speech' for this process)

Work in small groups - discuss **LB1.5**

KODAK SKILLS ENHANCEMENT PROGRAM

APPLYING WRITTEN INFORMATION IN THE WORKPLACE

MODULE 1: ORIENTATION

OBJECTIVES:

- introductions
- development of group identity
- overview of module content areas
- logistics
- norms and expectations
- self assessment

LB1.2

KODAK SKILLS ENHANCEMENT PROGRAM

APPLYING WRITTEN INFORMATION IN THE WORKPLACE

MODULE 1: ORIENTATION/ IDENTIFYING AND SUMMARIZING KEY IDEAS

MODULE 2: TECHNIQUES FOR ACCESSING INFORMATION

MODULE 3: CHARTS, GRAPHS & VISUALS

MODULE 4: CRITICAL THINKING WITH WORKPLACE MATERIALS

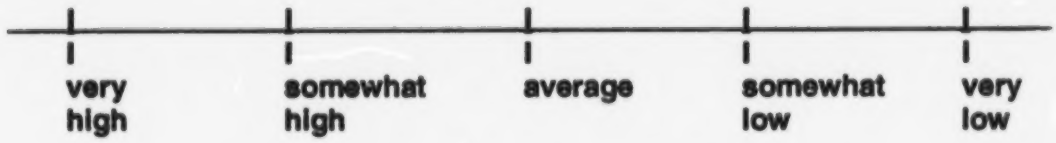
MODULE 5: ANALYTICAL READING/ CLOSURE

(Content and order subject to change based on needs of participants.)

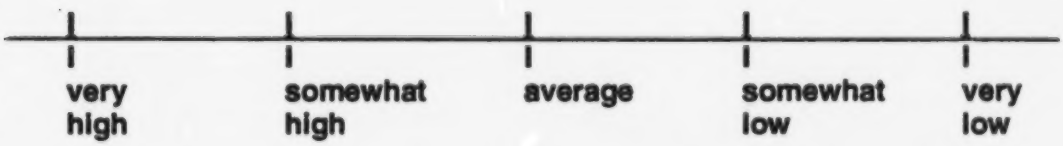
KODAK SKILLS ENHANCEMENT PROGRAM
APPLYING WRITTEN INFORMATION IN THE WORKPLACE

SELF ASSESSMENT

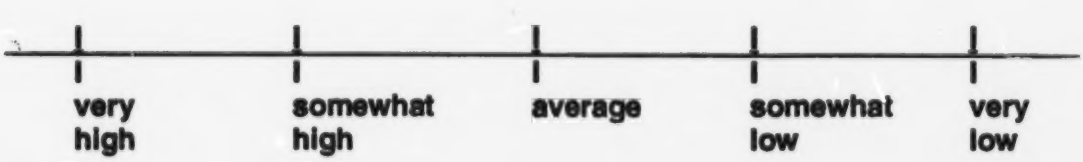
1. I would rate my comfort level and speed at interpreting and applying manufacturing instructions as:



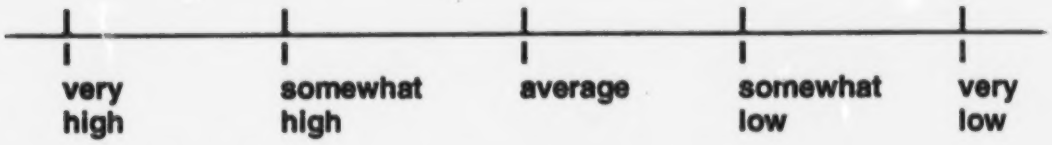
2. I would rate my comfort level and speed at skimming and scanning through longer pieces of workplace materials (safety policies, training manuals, shopfloor information, etc.) as:



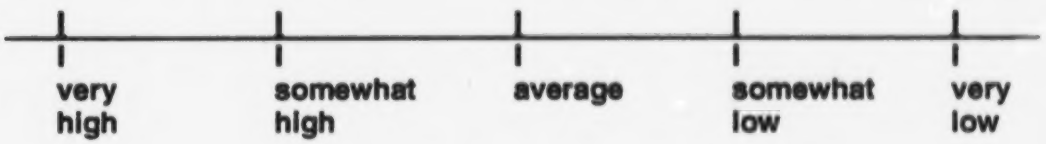
3. I would rate my comfort level and speed at interpreting information found on visually displayed materials (lists, charts, indexes, bar graphs, pareto diagrams, run charts, etc.) as:



4. I would rate my comfort level and speed at understanding implied meanings and drawing conclusions from written workplace materials as:



5. I would rate my comfort level and speed at making decisions based on written workplace materials as:



KODAK SKILLS ENHANCEMENT PROGRAM

APPLYING WRITTEN INFORMATION IN THE WORKPLACE

MODULE 1: IDENTIFYING AND SUMMARIZING KEY IDEAS

OBJECTIVES:

- **IDENTIFYING CRITICAL COMPONENTS**
- **IDENTIFYING SUPPORTING DETAILS**
- **CREATING JOB AIDS**
- **SUMMARIZING WRITTEN INFORMATION**

LB 1.4

Identifying Key Ideas

Directions: Identify the main action in each of the following directions.

2. Threading Rewinder with Support/Unstrapping

2.1 Load empty core at Winder Stand

2.2 Load roll at Unwind Stand

2.3 Using mylar tape flyer, attach clean threadup strap to leading edge of sheet

2.4 Trim leading edges of sheet to prevent creases and tearoffs

LB1.5

Identifying Critical Components

Directions: Mark the sentences in the following manner:

- **(Circle) the main action called for**
- **Put a [square] around the object of the action**
- **<u>Underline</u> supporting details answering the questions where? when? or how?**

1. At the next screen you will be asked if you want to print the change sheets only. Enter N (No) in the space and press enter.

2. Using end of roll summary length, subtract any footage removed.

3. Open the exhaust cover and vacuum the exhaust chamber starting at the top and working downward to prevent recleaning of the exhaust cover.

4. Before any cleaning, lubricating or maintenance operations are performed, the rewind machine drive motors are to be stopped and the main electrical supply switches shut off.

MODULE: #696
DATE: 03/29/92

Casting Daily Operations/ Sublimate Cleaning

4. FULL SUBLIMATE CLEANUP-#1 OS COOLER PORTION.

4.1 When readings have been given for the stripping roll cleaning of the air sweep/calendar roll can proceed.

4.2 When finish readings pass the cleaning station drop the u-coat hoppers and retract #1 defect detector.

4.3 After the machine has been cutback to #3tr. decrease the metering speed to 28 RPM and add 8% to each dye pellet feeder.

4.4 Remove the #1 OS cooler and clean as follows:

4.4.1 Remove the #1A and #1B plenums.

4.4.2 Thoroughly clean all cooler surfaces, inside and out.

4.4.2.1 The hickory stick with rag will be needed to clean inside the 1A exhaust.

4.4.3 Inspect the cooler surfaces with a flashlight to assure that the OS cooler is thoroughly clean.

4.4.4 Reassemble the OS cooler ensuring that the removable plenums are centered between their flanges and the guide pins on the 1A plenum extend fully out the holes in the OS cooler box.

4.4.5 After installing the #1B box, reach in the #1C exhaust slot to make sure the #1B box is drawn up tightly against the main OS cooler body.

4.4.5.1 If it is not, the #1C exhaust will draw air from the #1B exhaust, reducing it's ability to remove sublimate laden air.

4.5 Put the OS cooler back in place over the wheel and inflate the gasket.

4.6 Increase the metering speed to MSP.

4.7 NOTE: Do NOT clean the wheel edges. There is some potential that disturbing this sublimate causes u-coat repellencies and other under die sublimate problems.

4.8 Inspect all rolls prior to the u-coat hoppers and clean as needed.

4.9 Apply the u-coat hoppers and perform followup roll cleaning as needed.

3. Cleaning Procedure

Each time the rewind is to be cleaned the main electrical supply switches must be shut off. The following cleaning procedure is to be followed:

3.1 Wipe all rewind machine casings, frames, ledges, flat surfaces, enclosure walls (inside and out), bearing housings and guards with a towel dampened with ammonia and water

3.1.1 When cleaning over the reflected light viewing board a special bracket is to be used, to prevent damage to the viewing board. The bracket is stored in the rewind by the winder

3.2 Wipe rolls using a cloth dampened with ammonia and water

3.3 Vacuum where necessary.

3.4 Clean slitters with oil treated slitter cloths (oil treated Canton flannel). Be extremely careful as slitters are very sharp

3.4.1 A Chip brush is very handy for cleaning knurls. Around slitters or any area too small or remote to clean by handtowel method: use a small sash brush

3.5 Wash windows inside and out

3.6 Mop floors inside the machine enclosures

3.7 After all cleaning is completed, clean up and put the equipment away

3.8 **Wash hands and change cloths after the cleaning operation and before resuming examination of rolls of product.**

Cleaning of Rewinder/Strapping/Unstrapping

1. Strapping of Rewinder

   1.1 Remove empty core using Langly truck from Unwind. Reload gudgeons, select winder steering move to Manual

   1.2 Using mylar tape flyer, attach clean threadup strap to trailing edge of sheet

   1.3 Open pressure roll

   1.4 Reset footage counter to zero

   1.5 Set Line Speed at 100 fpm or less

   1.6 On winder side, depress jog button

      1.6.1 "Emergency Stop Reset" light will come on

      1.6.2 If jog button is released, "Emergency Stop" will occur.

   1.7 Depress "Emergency Stop Reset"

   1.8 Turn tension on.

   1.9 After a 10-15 second delay, rewinder will start.

      1.9.1 If jog button is released, Rewinder will shutdown, causing waste

   1.10 When Footage Counter reaches 115 feet or more, strap is through Rewinder

      1.10.1 At this time, release jog button to stop Rewinder

   1.11 At Winder end, remove strap off of roll

   1.12 Remove and package roll

   1.13 Rewinder cleaning may proceed at this time

2. Threading Rewinder with Support/Unstrapping

   2.1 Load empty core at Winder Stand

   2.2 Load roll at Unwind Stand

   2.3 Using mylar tape flyer, attach clean threadup strap to leading edge of sheet

   2.4 Trim leading edges of sheet to prevent creases and tearoffs

MAKING A JOB AID

Directions: Fill in the blanks in the JOB AID with critical components from the job procedure sheets.

1. _____ _____ _____
   Do? To What? Where?When?How?

2. _____ _____ _____
   Do? To What? Where?When?How?

3. _____ _____ _____
   Do? To What? Where?When?How?

4. _____ _____ _____
   Do? To What? Where?When?How?

5. _____ _____ _____
   Do? To What? Where?When?How?

ABSTRACT

In a March 27th, 1990 article in the Greeley Tribune there was an article titled "Japan has Advice for America". Near the top of Japan's list of 80 suggestions for improving the U.S. economy was worker training. The following paragraph was from that article.

"Japanese officials have urged the United States to cut its federal deficit, increase savings and investment and improve worker training, and education to boost the competitiveness of American exports."

Closer to home, the Wide Roll Quality of Worklife surveys have highlighted lack of training as a concern of Wide Roll employees. Add to that, Deming's 6th management point that recognizes retraining is as important to a manufacturing organization as is initial training, it is hard to overlook the need to enhance training capabilities to the maximum.

Although the training issue is a top conversation piece, the question remains, how can C-50 provide the necessary training, especially during the heavy vacation months of June, July and August, Holidays and hunting seasons? At best, when a crew is at full strength, only one trainee can be trained at a time. Compounding the issue is that very minimal learning takes place in the wee hours of the morning. Also, each production crew is operating with one less operator in 1990 than in 1988, and the KCD training department was cut from 17 employees to 6 employees. The question of training and retraining seems to be getting even more difficult to answer.

Summarizing Written Information

Directions: Read these paragraphs and summarize the information in as few words as possible.

1. Understand Key Result Areas
Through a review of the Key Result Areas identified as part of the unit assessment and the planning steps just discussed, the team can identify major improvement opportunities: those key processes which are in greatest need of improvement and which, when improved, will better enable the unit to provide its customers with superior value.

   Simplified Summary:

2. Quality Policy
We are committed to being the world leader in the quality of the products and services that we provide. The company's goal is to continuously improve our products, services and operations so that we constantly offer customers superior value. This will allow us to prosper as a business and provide a superior return for our `.

   Summary statement:

FREE CREDIT REPORT

AVAILABLE FOR KCD CREDIT UNION MEMBERS

IT'S SAFE TO SAY THAT MOST PEOPLE HAVE NEVER SEEN THEIR CREDIT REPORT. BUT THEY SHOULD - AND NOW YOU CAN SEE YOURS FREE ! !

WHY SHOULD YOU SEE IT? "MORE THAN 2 OUT OF 5 PEOPLE HAVE SOME ERRONEOUS INFORMATION ON THEIR CONSUMER CREDIT REPORTS," SAYS JAMES WILLIAMS, PRESIDENT OF CONSOLIDATED INFORMATION SERVICES. MOST ERRORS OCCUR WHEN FILES FROM DIFFERENT PEOPLE GET JUMBLED - FAMILY MEMBERS WITH THE SAME NAME OR ADDRESS, PEOPLE WITH "COMMON NAMES". A WRONG DIGIT IN A SOCIAL SECURITY NUMBER CAN EASILY DRAG DATA FROM SOME "DEADBEAT'S" FILE INTO YOURS, AND THERE GOES YOUR CREDIT!

BUT EFFECTIVE MAY 1, 1992 YOU MAY PICK UP A FORM FROM THE KCD CREDIT UNION FOR A FREE CREDIT REPORT ON YOURSELF FROM TRW CREDIT DATA. TRW WILL MAIL THE REPORT TO YOUR HOME SO YOU CAN CHECK FOR ERRORS YOURSELF.

5-1-92

EACH MEMBER ACCOUNT INSURED TO $100,000-, BY THE NCUA.

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T1.1

KODAK SKILLS ENHANCEMENT PROGRAM

APPLYING WRITTEN INFORMATION IN THE WORKPLACE

MODULE 1: ORIENTATION

OBJECTIVES:

- introductions
- development of group identity
- overview of module content areas
- logistics
- norms and expectations
- self assessment

T1.2

KODAK SKILLS ENHANCEMENT PROGRAM

APPLYING WRITTEN INFORMATION IN THE WORKPLACE

MODULE 1: ORIENTATION/ IDENTIFYING AND SUMMARIZING KEY IDEAS

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Identifying Critical Components

Directions: Mark the sentences in the following manner:

- **(Circle) the main action called for**
- **Put a [square] around the object of the action**
- **<u>Underline</u> supporting details answering the questions where? when? or how?**

1. After the message has been displayed, press enter and you will be returned to the main menu.

2. Deliver the scanner map and the interleaved sample to Product Staff.

3. When cleaning over the reflected light viewing board, a special bracket is to be used to prevent damage to the viewing board.

4. After all cleaning is completed, clean up and put the equipment away.

T1.5

MODULE: #696
DATE: 03/29/92

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T 1.7

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   1.4 Reset footage counter to zero

   1.5 Set Line Speed at 100 fpm or less

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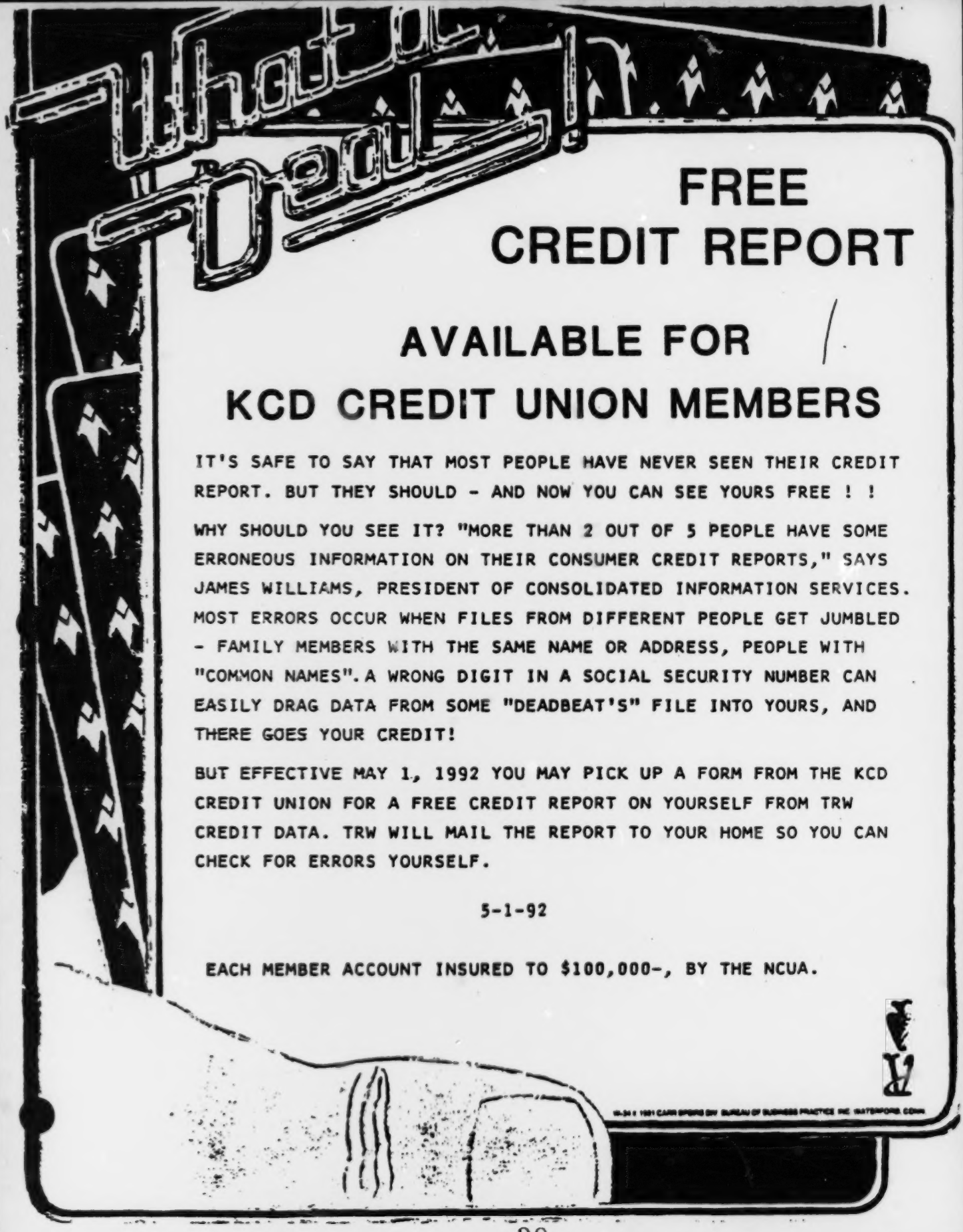

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KCD CREDIT UNION MEMBERS

IT'S SAFE TO SAY THAT MOST PEOPLE HAVE NEVER SEEN THEIR CREDIT REPORT. BUT THEY SHOULD - AND NOW YOU CAN SEE YOURS FREE ! !

WHY SHOULD YOU SEE IT? "MORE THAN 2 OUT OF 5 PEOPLE HAVE SOME ERRONEOUS INFORMATION ON THEIR CONSUMER CREDIT REPORTS," SAYS JAMES WILLIAMS, PRESIDENT OF CONSOLIDATED INFORMATION SERVICES. MOST ERRORS OCCUR WHEN FILES FROM DIFFERENT PEOPLE GET JUMBLED - FAMILY MEMBERS WITH THE SAME NAME OR ADDRESS, PEOPLE WITH "COMMON NAMES". A WRONG DIGIT IN A SOCIAL SECURITY NUMBER CAN EASILY DRAG DATA FROM SOME "DEADBEAT'S" FILE INTO YOURS, AND THERE GOES YOUR CREDIT!

BUT EFFECTIVE MAY 1, 1992 YOU MAY PICK UP A FORM FROM THE KCD CREDIT UNION FOR A FREE CREDIT REPORT ON YOURSELF FROM TRW CREDIT DATA. TRW WILL MAIL THE REPORT TO YOUR HOME SO YOU CAN CHECK FOR ERRORS YOURSELF.

5-1-92

EACH MEMBER ACCOUNT INSURED TO $100,000-, BY THE NCUA.

IDENTIFYING AND SUMMARIZING MAIN IDEAS

Multiple Choice Choose the best answer from the selection given and write it on the line to the left.

_____ 1. Define what a main idea is.
A. The main idea gives several supporting reasons for the idea in a sentence or paragraph.
B. The main idea includes supporting details about the information in a paragraph or sentence.
C. The main idea is the most logical one mentioned in a paragraph or sentence.
D. The main idea is the most important point of a sentence or paragraph or a brief summary of it.

_____ 2. In the **first** paragraph on page 3 the main idea is that
A. there is a need for an increased level of skills in corporations.
B. as global competition increases, the need for ongoing skill development will continue to increase.
C. technology such as on-line computers and greater variety of products means a need for better skills.
D. KCD, in conjunction with CSU and the U.S. Department of Education, has developed a program to give employees the opportunity to develop skills for the future.

_____ 3. In the **third** paragraph on page 3 the main idea is that
A. one of the classes offered will be "Math for Manufacturing and Quality Control".
B. the Kodak Skills Enhancement Program will focus initially on reading, writing, and mathematics skills which are critical for continued growth in the workplace.
C. there are reading, writing, and mathematics skills that are required for a large number of jobs at KCD.
D. the Kodak Skills Enhancement Program will be available to all interested employees.

_____ 4. In the **fourth** paragraph on page 3 the main idea is that
A. the Kodak Skills Enhancement Program will focus initially on reading, writing, and mathematics skills.
B. individual consultation will be available after the introductory workshop for making decisions about future training.
C. an introductory workshop will describe skills needed to participants and provide a confidential assessment of their skills.
D. each workshop will introduce employees to the training available through the Skills Enhancement Program.

_____ 5. In the **fifth** paragraph on page 3 the main idea is that
A. KCD, CSU, and the U.S. Department of Education are cooperating to provide the Kodak Skills Enhancement Program.
B. individual appointments will be available to employees to help them decide if they want further training in math, reading, and writing.
C. group classes are being planned in math, written information, and written communication.
D. no Kodak employees will have access to any scores besides their own.

_____ 6. In the **sixth** paragraph on page 3 which begins, "In addition, individuals will. . ." the main idea is that
A. employees can begin asking their supervisors for time to attend the classes in February.
B. the Kodak Skills Enhancement Program will porvide confidential, individualized assessment and consulting for future training decisions.
C. the options of self-directed learning and tutoring are part of the Kodak Skills Enhancement Program.
D. group classes are open to Kodak employees interested in continuing their lifelong learning.

Directions: Mark the sentences in the following manner:

* **(Circle)** the main action called for
* Put a **[square]** around the object of the action
* **Underline** supporting details answering the questions where? or when? or how?

7. Clean slitters with oil treated slitter cloths (oil-treated Canton flannel). Be extremely careful as slitters are very sharp.

8. Mop floors inside the machine enclosures.

9. After cleaning is completed, clean up and put the equipment away.

10. **Wash hands and change cloths after the cleaning operation and before resuming examination of rolls of product.**

KODAK SKILLS ENHANCEMENT PROGRAM

APPLYING WRITTEN INFORMATION IN THE WORKPLACE

MODULE 2: USING TECHNIQUES TO ENHANCE SPEED AND COMPREHENSION

Objective: To apply techniques for skimming and scanning and sequencing.

Background: Workers must be able to manipulate reading strategies which are appropriate for given situations. There is a great deal of written material for operators. Not all material has to be read in the same way. Readers become more effective when they can apply the appropriate technique to the reading situation.

INTRODUCE OBJECTIVES/CONCEPTS

Present Techniques **T2.1 (LB 2.1)**
- Skimming
- Scanning
- Sequencing
- Systems

Define each of the concepts **T2.2 (LB 2.2)**

Determine purpose for reading **T2.3 (LB2.3)**

Discuss purpose for techniques **LB 2.2**

Skimming--reading quickly for general infromation
- Discuss when to use, possible problems, etc.
- Modeling and Group Practice **LB 2.4 a-f**
  1. Ask questions which would only allow enough time for skimming
  2. Ask participants how they came up with answers
- Individual Practice **LB2.5-LB 2.6a &b**

Scanning--reading quickly for specific information
- Discuss when to use, possible problems, etc.
- Modeling and Group Practice **LB 2.7 a-d**
  1. Ask questions which would only allow enough time for scanning
  2. Ask participants how they came up with answers

Individual Practice — **LB 2.8**

Review Skimming and Scanning

Model
Practice — **LB 2.9-2.10**
Review — **LB 2.11**

PART II: Introduce **sequencing** as a way to order written information.

Define **sequencing**

Ask participants to write down what they do when they get to work each day. Have them report out. As they do, write down all sequence words which are used.

Model how using sequence is helpful in reading comprehension and memory.

Ask participants why it might be helpful to remember things in order of sequence. Chart responses.

Practice using sequence words — **LB 2.12**

Individual and group practice — **LB 2.13**

Part III: Using **systems** as a reading technique

Introduce concept

Ask participants what they look for when they are trying to get an idea about what they are reading. Chart responses.

Model — **LB 2.14a-b**

Practice — **LB 2.14c-f**

LB2.1

KODAK SKILLS ENHANCEMENT PROGRAM

APPLYING WRITTEN INFORMATION IN THE WORKPLACE

MODULE 2: TECHNIQUES FOR ACCESSING INFORMATION

OBJECTIVES:

- Identifying Reading Strategies
- Relevant & Irrelevant Information
- Skimming & Scanning
- Using sequence signal words
- Utilizing systems and subsystems

LB2.2

KODAK SKILLS ENHANCEMENT PROGRAM

FOUR TECHNIQUES FOR ACCESSING INFORMATION

SKIMMING: Reading quickly to get the general idea

Examples:

SCANNING: Reading quickly to find specific information

Examples:

SEQUENCING: Using signal words to identify the order

Examples:

SYSTEMS: Using format clues to identify the organizational structure

Examples:

LB2.3

KCD
APPLYING WRITTEN INFORMATION IN THE WORKPLACE
ASSESS * PLAN * DO * VERIFY

1. ASSESS

What is my reason for reading this?
What do I want to know when I finish?

2. PLAN

What information do I already have?
What information do I need from this material to solve my work problem?
Which information accessing techniques is the best one to use while reading this material?
How carefully do I need to read it? (general or detailed? all or part?)

3. DO

Read.
Monitor your own comprehension.
Watch for format and organizational clues.
Choose which information is important as you go.

4. VERIFY

Did I learn what I needed to know?
Can I solve my work problem?

Foreword

This guidebook tells how to put Eastman Kodak Company's Quality Leadership Process—a systematic, pervasive approach to constantly improving the quality of products and services of all operations—to work. In doing so, it builds on the overview contained in the brochure titled "Eastman Kodak Company Quality Leadership Process."

This guidebook shows how the Quality Leadership Process can be applied to achieve continuous improvement. It also provides an overview of tools useful in implementing the process and tells how to get help in applying the process. And it contains a glossary that explains some of the key terms used on the pages that follow.

What Do We Mean by Quality?

Quality is defined by current and future customers. Customers want products and services that they perceive meet or exceed their needs and expectations, at a cost that represents outstanding value. Therefore, we must meet the needs of all customers. This includes:

- Current customers
- Customers that we lost but wish to regain, and
- New customers for either current or new products or services.

Believing in this definition of quality places on each of us the responsibility of identifying customer needs and expectations, innovating to improve current products and services and to create new ones, and understanding the degree to which our offerings represent value.

LB 2.4c

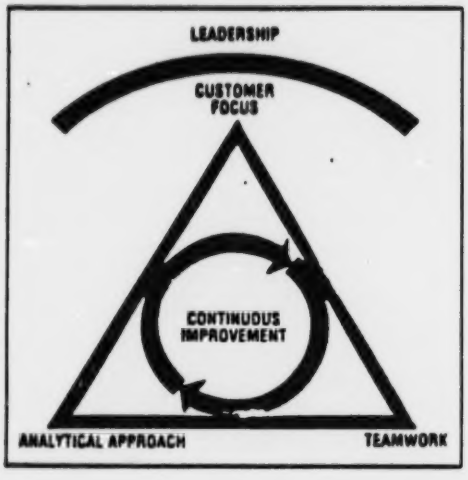
Quality Principles

Eastman Kodak Company's Quality Policy

We are committed to being the world leader in the quality of the products and services that we provide. The company's goal is to continuously improve our products, services and operations so that we constantly offer customers superior value. This will allow us to prosper as a business and provide a superior return for shareowners.

Quality Principles Support this Quality Policy

There are five quality principles that support our quality policy. These principles work together as shown in this illustration.

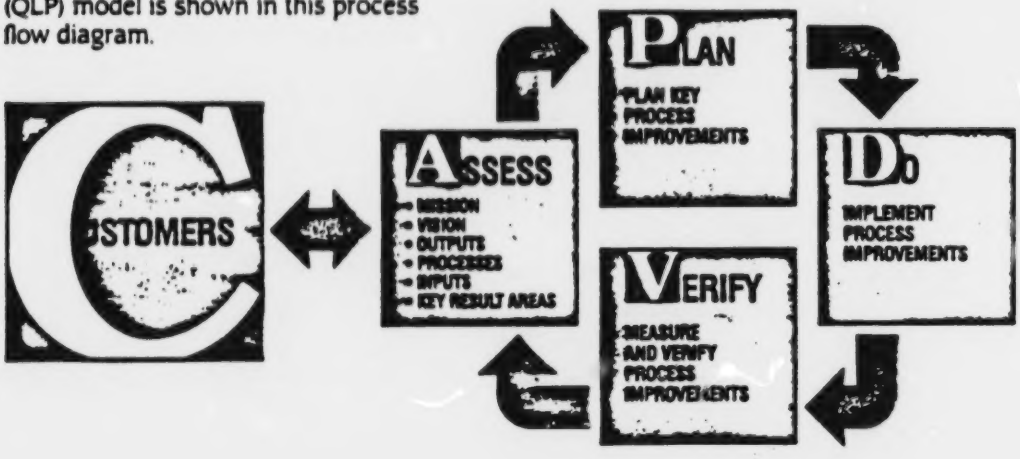


1. **Customer Focus:** We will focus on our customers, both internal and external, whose inputs drive the design of products and services. The quality of our products and services is determined solely by these customers.
2. **Management Leadership:** We will demonstrate, at all levels, visible leadership in managing by these principles.
3. **Teamwork:** We will work together, combining our ideas and skills to improve the quality of our work. We will reinforce and reward quality improvement contributions.

   The company can be viewed as a team composed of many interlocking teams, each sharing, at its interfaces, key information linked to mission, vision, and other elements of organizational focus. These teams take a variety of forms and are like small businesses with customers, suppliers, and processes. Each must strive to continuously improve the quality of its own outputs. *Everyone* is involved in quality leadership.
4. **Analytical Approach:** We will use statistical methods and other problem-solving tools to control and improve our processes. Data-based analyses will direct our decisions.
5. **Continuous Improvement:** We will actively pursue quality improvement through a continuous cycle that focuses on assessing and also on planning, doing, and verifying improvements of key processes.

The Quality Leadership Process Model

The Quality Leadership Process (QLP) model is shown in this process flow diagram.



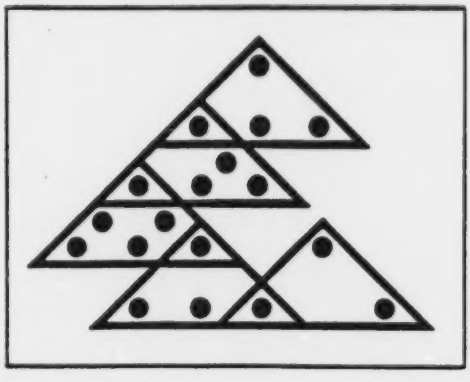
The QLP Model has been developed from the best of the quality models used within and outside Kodak. It's based on extensive experience in many different settings. And it is endorsed and practiced by Kodak's top management.

The QLP Model focuses on customers, both internal and external, and identifies four key actions—Assess, Plan, Do, and Verify—which are linked as shown in the illustration above and which together drive process improvements. The QLP Model makes it possible to improve the quality of existing processes throughout the company and, in so doing, to improve the quality of products and services produced through these processes. It also enables us to continually identify new processes. As you look at this model, you may realize that you're using it or elements of it already.

Teamwork is Critical

The drive to improve quality originates at the top of the company and permeates the whole Kodak organization. The leadership to address specific improvement opportunities must come from all levels of the company.

As the diagram below shows, the company is composed of a series of interlocking teams. Because the organizational structure of the company is linked in this way, process improvements made in one part of the organization become linked to other parts of the organization.



When your unit uses the QLP Model, the unit's management, as a team, starts with the Assess step. (*Unit* means an organization, division, department, or work center. *Management* means a team or individuals who manage(s) resources at any level in the organization.)

The unit's management team either works on an improvement project itself or, after the assessment and planning steps, commissions a project team that works on the improvement project.

The unit's management team that initiates the Quality Leadership Process can be referred to as a permanent team because it is made up of people who already work together within the unit's structure. Such a team is sometimes referred to as a management team, natural unit team, organizational team, business team, stream team, or flow team.

Project teams are temporary and may be organized in a variety of ways to ensure that they employ the appropriate talent and functions required to handle the project. For instance, they may be cross-functional or vertically integrated. The unit's management team commissions project teams with a specific purpose and clear direction regarding deliverables and time frames.

Obviously, leadership plays a key role in the effective use of the Quality Leadership Process. This leadership must focus on the process and use skills such as modeling, coaching, celebrating, and enabling in order to foster innovation, to manage resources devoted to quality improvement, and to identify improvement opportunities.

Effective Teamwork

Teams play a key role in implementing the Quality Leadership Process. To work most effectively, teams should:

- Have a mission and defined deliverables.
- Provide all team members with the opportunity to participate fully and to demonstrate leadership characteristics.
- Have trusting and open relationships. Disagreement or conflict naturally occur within a team and discussion and problem-solving methods are used to resolve it.
- Establish rules of conduct that guide and regulate the group's activities. For instance, teams meet regularly and follow agendas. A unit's management team agenda may include a review of key measures and meeting notes, identification of improvement opportunities, allocation of resources to address these opportunities, and commissioning of project teams. Teams also meet scheduled deadlines.
- Enable team members to communicate openly and honestly through the use of listening and responding skills.
- Use appropriate problem-solving and decision-making methods.
- Encourage creativity through methods such as brainstorming. Members have a tolerant attitude that allows flexibility in dealing with problems and decisions.
- Examine their group processes periodically to see what is working and what is not.

Dangers to Avoid

You may be thinking, "With all those steps the QLP Model looks like it is time consuming to apply. Can it be shortened in any way when a burning issue needs to be addressed quickly?"

BEWARE! It *is* possible to take shortcuts in applying the QLP Model when you need very fast results, but there's a danger here. For instance, you may be tempted to begin with the Plan step, move in turn to the Do step, and then either stop or return to the Plan step to perform another improvement.

The danger in using this shortcut is that by initially bypassing the Assess step you will miss valuable upfront customer input. As a result, you run the risk of solving a problem that is unimportant to customers or that fails to fit in with the strategic needs of the organization. Therefore, if you need fast results, it's safer to follow this course: Begin with the Plan and Do steps, then *immediately* move on to Verify and back to Assess to confirm that you're working on the right project.

In short, make sure your "Plan-Do quick-start" serves as a prelude to using *all* the steps in the QLP Model.

Leadership: A Key Element in the Quality Leadership Process

Continuous improvement requires exemplary leadership. Here's a checklist to help you identify your leadership skills. These skills are beneficial for *anyone* involved in making quality improvements, not just managers.

- ☐ Do you inspire others to share a vision of what can be?
- ☐ Do you take risks rather than accept the status quo?
- ☐ Do you serve as a role model for others?
- ☐ Do you strengthen others and help them to act?
- ☐ Do you listen effectively? (Effective listening behaviors include maintaining attention, keeping an open mind, hearing others out, suspending judgment, reflecting on what has been said, and responding appropriately.)
- ☐ Do you accentuate the positive and recognize the accomplishments of others?

LB2.5

Techniques for Accessing Information

Directions: Use the information on LB2.6 a+b to complete this exercise.

Scenario: You have been asked to look over the information on the Welcome to Kodak Colorado brochure to decide if you would be able to give a brief orientation on Kodak and KCD to a group of visiting businessmen. Although the overview wouldn't be scheduled for several weeks, your decision is needed right away.

1. Assess - What is your purpose for reading this info? What do you need to know or do with the information?

2. Plan - What information do you already have? What do you need? What key words will you look for? What is the best way to go about reading this information at this time? How carefully do you need to read it?

3. Do - Spend about 1 minute quickly reading the information. What new information is important for you to remember right now?

4. Verify - Did you learn what you needed to know to give your answer? What would your next step be in this process?

Introduction

When you take a snapshot—perhaps of your child's first birthday, your son's graduation, your daughter's wedding, your grandparent's 50th anniversary—you are capturing a moment that will never happen again. As long as you live, you can never again experience that event. Through the magic of photography, however, you can relive the happy memories for years to come.

Photography is a powerful medium capable of provoking strong emotions, from extremes of joy, to that nice warm feeling that comes with happy memories, to bittersweet nostalgia. It can be a form of artistic expression to inspire awe in the grandeur of the universe. It can see things the eye cannot see by stopping time, speeding it up, or slowing it down. It can be an invaluable aid to the researcher and a useful tool in industry and health care.

The fraction of a second in which the image is recorded on film is the tiniest link in a complex chain of physical and chemical events that must fall into place precisely if all is to work together correctly.

Kodak wants to help make sure that you are pleased with the pictures of your child's first birthday, that publishers are satisfied with the quality of the offset-printed product you are going to read, that microfilm copies are truly accessible for records purposes, that doctors are able to interpret your x-rays with confidence, that millions of people using film and paper in thousands of applications are satisfied with their results. Kodak wants your pictures to look the way you want them.

For more than a century, Kodak people have prided themselves on their ability to make photographic products that serve consumers well. Today, they continue to work hard to merit your continued trust.

This, first, is Kodak's story. Then, more particularly, it's the story of the Kodak Colorado Division.

(On the cover)
Entrance to Kodak Colorado Division Administration Building, C-41

BEST COPY AVAILABLE

The Beginning

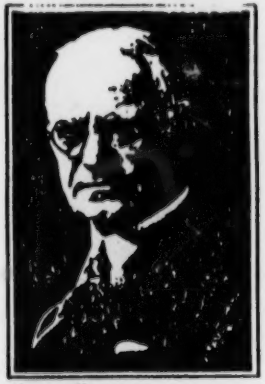
In the mid-1870s, a young man named George Eastman decided to try simplifying the then-cumbersome, 40-year-old craft of photography. Starting at his mother's sink and later expanding to the loft of a small building, the young inventor first developed a simpler way of coating a more permanent light-sensitive photographic emulsion on the glass plates then in use as picture-taking material. Later, he replaced the glass with a light, flexible support substance that is basically what we know today as film.

In 1881, he formed the Eastman Dry Plate Company and set out on a pursuit that eventually was to make photography available to most everyone, not just the professional lensman or the wealthy dabbler. He introduced his first Kodak camera and roll film, capable of taking 100 pictures, in 1888. In 1901, the present Eastman Kodak Company was incorporated.

Kodak's corporate headquarters and its two largest photographic manufacturing divisions are located in Rochester. The Kodak Apparatus Division is responsible for the "hardware" side of the business: cameras, projectors, and equipment; while the Kodak Park Site is responsible for the software side of photography: film, papers and chemicals.

Kodak Colorado is a division of the Worldwide Sensitized Goods Manufacturing Organization and operates as the western extension of the Kodak Park Site.

Kodak Colorado is the company's primary manufacturing center for medical x-ray film and aluminum lithographic printing plates. It also engages in some of the stages of manufacturing a variety of other photographic films and papers. Established in 1968, it is the company's only sensitized goods manufacturing facility in the United States outside Rochester.



George Eastman, founder of the Eastman Kodak Company.

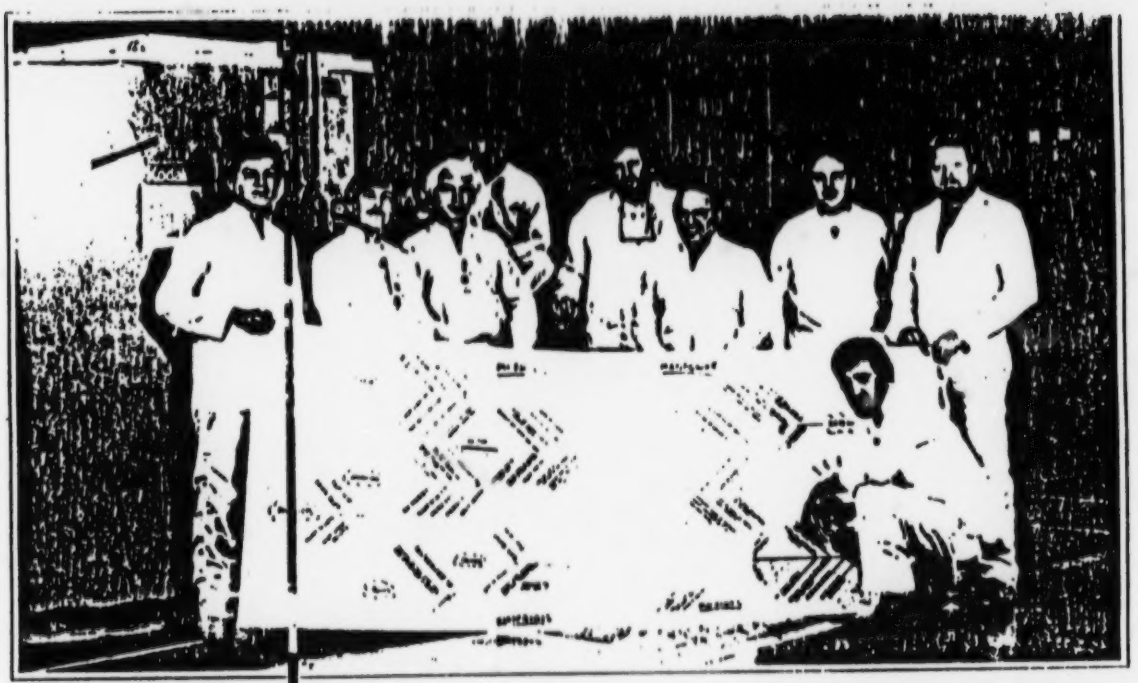
While the Rochester operations have continued to grow, diversify, and keep abreast of the latest technologies, studies in the 1960s showed that Kodak would have to expand its manufacturing capacity for photographic films and papers to better serve customer needs.

The selection of the current site near Windsor, Colorado, was the culmination of an exhaustive three-year search through much of the Midwest and far West. The location offered an abundance of attractive features: the availability of a large parcel of land providing room for growth, an adequate water supply, a good transportation and distribution network, an excellent labor market, nearby universities and vocational schools, and a variety of attractive residential communities offering culture, recreation and scenic beauty.

Of the 2,200 acres owned by Kodak Colorado, some 600 have been developed industrially. Nine major buildings and numerous smaller service structures provide more than three million square feet of area for manufacturing operations, administrative offices, support facilities, distribution and storage. Most of the remaining land is used for agricultural purposes or held aside for wildlife.

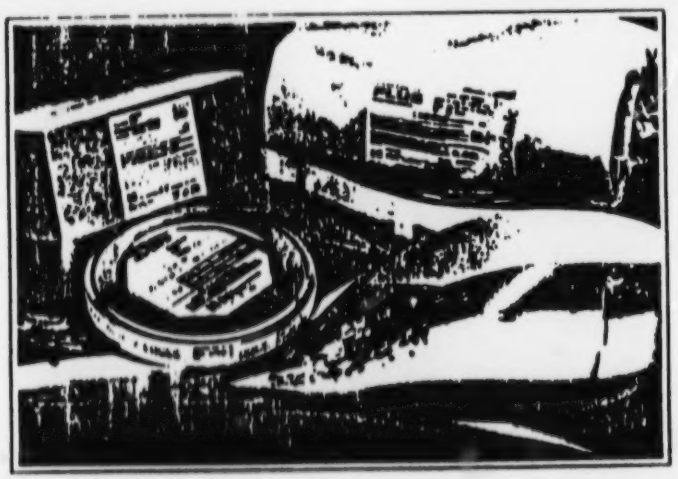
Designing a new manufacturing complex of this size, literally from the ground up, represented a challenge and an opportunity. While the buildings are architecturally designed to blend attractively with the landscape, they are also functional, promoting a smooth flow of raw materials and finished products among operations. Kodak Colorado is a high-volume, high-efficiency manufacturing facility utilizing modern, state-of-the-art equipment and manufacturing processes to make high-quality products.

(Right) Kodak Colorado Division employees are actively involved in the application of quality management through statistical process control and teamwork.



Kodak Quality

The Eastman Kodak Company has a strong culture of quality, set in place by George Eastman 100 years ago. His concept of selling quality products to meet customer needs is ingrained in the company. Dedicated to the concept that achieving quality through continuous improvement is a journey, not a destination, Kodak continues to enhance the application of quality management through statistical process control, teamwork, and performance management.



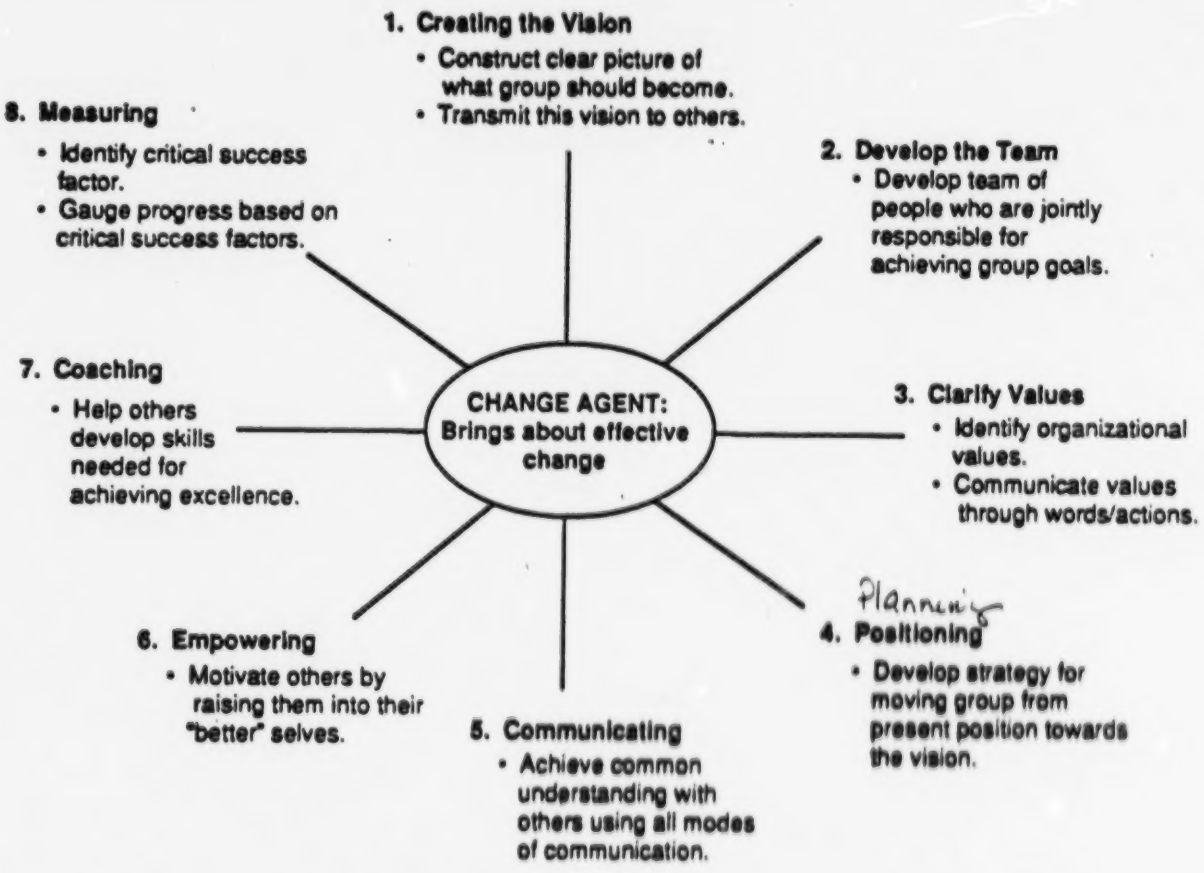
Kodak Colorado Division products.

LB 2.6b

Quality Leadership Process

Leadership

The Basic Functions of a Leader/Manager
(William Hitt)


1. Creating the Vision
• Construct clear picture of what group should become.
• Transmit this vision to others.
2. Develop the Team
• Develop team of people who are jointly responsible for achieving group goals.
3. Clarify Values
• Identify organizational values.
• Communicate values through words/actions.
4. Positioning
• Develop strategy for moving group from present position towards the vision.
5. Communicating
• Achieve common understanding with others using all modes of communication.
6. Empowering
• Motivate others by raising them into their "better" selves.
7. Coaching
• Help others develop skills needed for achieving excellence.
8. Measuring
• Identify critical success factor.
• Gauge progress based on critical success factors.
CHANGE AGENT:
Brings about effective change

CRITERIA FOR EFFECTIVE LEADERSHIP:
Successful accomplishment of these functions will produce both short-term and long-term results in an acceptable manner.

The Role of the Leader/Manager in the Continuous Improvement Cycle

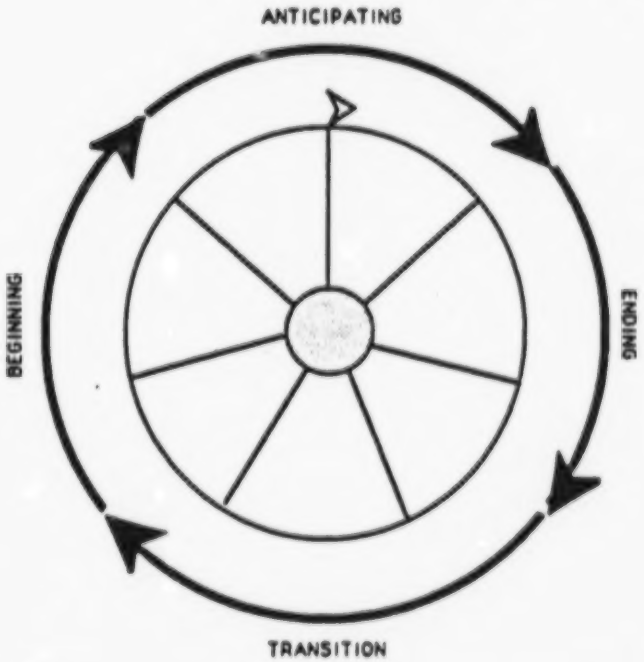
The above drawing shows how the Hitt Model correlates to the Continuous Improvement Cycle. The eight essential functions of the Leader/Manager are used throughout the Continuous Improvement Cycle. This means that a person who is effective in carrying out these eight functions is very likely to be effective in the Quality Leadership Process.

Quality Leadership Process

Leadership

The Role of the Leader in the Quality Leadership Process

The Quality Leadership Process is about "Continuous improvement" and involves learning—and it involves change. Change, as discussed in the previous section, is stopping one thing and doing another. Usually, there is a **transition** period between the ending and beginning of a new "program" or "task," which unleashes powerful conflicting forces in people. So, one thing LEADERS do is to understand change and how to manage the emotions of change.



- Leadership is a QUEST, an adventure. Leaders are pioneers, trailblazers...they set new paths. In order to achieve our VISION OF GREATNESS, we have to CHALLENGE THE PROCESS, by seeking opportunities for change and improvement and by taking risks.

  √ Leadership is the heart and soul of implementing the Quality Leadership Process...and can come from anybody, at any time.

  √ Leadership starts with SELF and involves:
  —self-awareness and self-knowledge;
  —bringing out the best in yourself and others.

- The LEADER in the Quality Leadership Process has several things to do:

  √ **Change directions**—leaders create shifts and are aware of the "transition state," which is the psychological process of moving "from HERE TO THERE."

  √ **Manage transitions**—leaders deal with emotions.

  √ **Vision** a desired future state—leaders are "forward-looking"—have direction for planning; it is what will "make a difference."

  —They set expectations/aggressive targets and use the Quality Leadership Process to accomplish these targets.

  √ **Lead people to the vision**—leaders inspire, mobilize and energize people to reach the vision.

  —Leaders teach and facilitate the Quality Leadership Process.

  √ **Set the example**—the leader is the role model for the Quality Leadership Process.

  —When leaders role-model the Quality Leadership Process, they communicate successes.

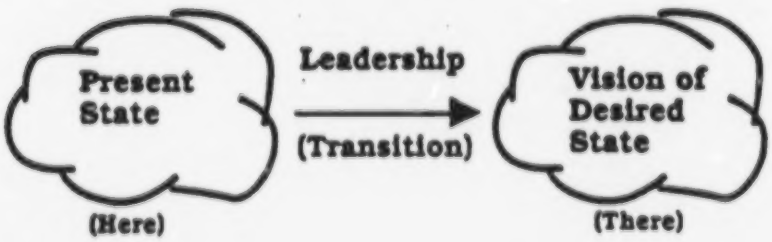
  √ Create and maintain an **environment** that supports and rewards learning and change—leaders bring out the BEST in people.

  —They continue to gain expertise in quality.

  —They observe and review implementation progress based on specific criteria.

  —They recognize/reinforce with appropriate consequences and celebrate progress.

CHANGE PROCESS



LB2.8

Techniques for Accessing Information

Directions: Use the information on LB2.7 (a-d) to complete this exercise.

Scenario: You have been asked if you would like to train to be a leader/manager for your self directed team. Your answer is needed after lunch. You need to know what the specific expectations would be of you in that position. Look over the information from the Quality Leadership Process guidebook on leaders/managers to find the information.

1. Assess - What is your purpose for reading this info? What do you need to know or do with the information?

2. Plan - What information do you already have? What do you need? What key words will you look for? What is the best way to go about reading this information at this time? How carefully do you need to read it?

3. Do - Spend a short time quickly reading the information. What new information is important for you to remember right now?

4. Verify - Did you learn what you needed to know to give your answer? What would your next step be in this process?

LB2.9

Techniques for Accessing Information

Directions: Use the information on LB2.10 to complete this exercise. Follow the Assess, Plan, Do, Verify process (LB2.3) to discuss the following scenarios and information accessing techniques with your partner.

1. You're new to KCD and just heard that you have access to the Medical Department as a benefit.

2. You work a lot with chemicals and want to know if the Medical Department can let you know if they are affecting you adversely.

3. You know Kodak has a recycling program and want to know more about it.

4. You want to know if you can recycle computer paper through PPI.

GETTING TO KNOW OUR MEDICAL DEPARTMENT

If you only stop by the Medical Department to weigh yourself or check your blood pressure, you may be interested in knowing the other services they offer:

* Lab work, x-rays, and physical therapy upon a signed order from your physician, at no cost to the employee.

* Initial evaluation of non-work-related illnesses or injuries and, if necessary, referral to a doctor.

* Response to emergencies when 911 is dialed on plant site.

* Contact with employees who have been absent 5 or more working days, to check their progress, determine work restrictions, and schedule a return-to-work visit to Medical.

* Handling of workers compensation cases and employees on restriction.

* Periodic exams of employees exposed to chemicals, noise, etc.

* Drug screening, hearing, and vision tests on new hires.

* Safety glasses, vision testing, and eyeglass fitting for employees.

* Handling of benefits problems referred by the PRO Offices.

* Upon department request, presentations to employees on subjects such as Back Injury Prevention.

* Approval of transfers (to assure employee has no medical problems which would affect him/her in the new job).

* Clearance for use of fitness equipment on plant site.

For more information about these and other services offered, call x4350. (Thanks to Doyte Elliott for the above information.)

PACKAGING REUSE/RECYCLING PROGRAM STARTED

The PPI (Print & Publishing Imaging) business unit of Eastman Kodak Company is trying out a new pilot program which would enable Kodak to take back all of its packaging materials for evaluation of reuse and recycling possibilities. Realizing the significant contribution packaging waste has to filling up landfills, PPI, via this pilot program, is trying to do its part to improve the solid waste dilemma. This program is being established to address the environmental pressures which are growing daily.

There are 19 customers available for this pilot program. Cores, cases, bags, and foam trays are being recycled. A collection center has been set up in Scottsville, New York.

PPI's long-term goal, through experience gained by pilot programs such as this, is to design packages with the emphasis on reuse and recycling, thus reducing the cost of each supply.

This program will help not only the environment, but also our customers and Eastman Kodak Company.

LB2.11

Techniques for Accessing Information

1. Define skimming.

2. Give some examples of times you might use skimming at KCD.

3. Define scanning.

4. Give some examples of times you might use scanning at KCD.

5. What thinking strategies would you use to decide which inf ormation accessing technique to use?

TECHNIQUES FOR ACCESSING INFORMATION

SEQUENCING JOB INFO

Directions: Choose any <u>two</u> KCD job info sequencing activities below. Use information from the job you do as the content to complete them.

Activity #1. List the tasks you do in the order that you would train a new operator to do them. You may choose one or more types of sequence. For example, you might have a sequence within another sequence, such as simple to complex within chronological.

Activity #2. Describe several errors that can occur in your job and the corrective measures you would take for each error if it occured.

Activity # 3. Give a verbal/visual map of the equipment around your work area and the reason(s) it is arranged that way. You might describe how it could be arranged better.

Activity #4. Describe the more complex aspects of you job to an operator who has worked in another job area. Use the other operator's experience on which to build your description.

Overview of the Tools You Can Use

The sections that follow describe in detail each step in the QLP Model and how to apply it. There are a variety of statistical and problem-solving tools that can help you use the model. This chart lists these tools and shows where in the QLP Model you'll find them useful. In the description of each step in the QLP Model you'll find references to the major uses of these tools. The *Tools* section, which follows the detailed discussion of the four steps in the QLP Model, describes in detail each of the tools listed here. The *Resources* section near the end of this guidebook lists further readings that may also provide more information on using these and other tools.

	A	P	D	V
Affinity Diagram (see p. 25)	●	●		
Benchmarking (see p. 26)	●	●		●
Brainstorming (see p. 26)	●	●	●	●
Cause-and-Effect (fishbone) Diagram (see p. 27)		●	●	●
Checksheet (see p. 28)		●	●	●
Control Chart (see p. 29)	●	●	●	●
Design of Experiments (see p. 30)			●	●
Flow Chart (see p. 30)	●	●	●	●
Force Field Analysis (see p. 31)		●	●	
Histogram (see p. 31)	●	●	●	●
Matrix Data Analysis (see p. 32)	●	●		
Pareto Chart (see p. 32)	●	●	●	
Pareto Voting (see p. 33)	●	●	●	
Quality Function Deployment (see p. 34)	●	●		●
Run Chart (see p. 35)	●	●	●	●
Scatter Plot (correlation diagram) (see p. 37)	●	●	●	●

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Tools

This section includes a description of each of the statistical and problem-solving tools referred to in the earlier sections of this guidebook. For each tool there is a color-coded key which identifies where in the QLP Model the tool can be used.

1. Affinity Diagram

AP

Characteristics of an Effective Team

Share
- Share information
- Share responsibilities
- Pitch in
- Put team before self

High Esteem
- High self-esteem
- High regard for each other
- Trust each other
- Play together

Clear Processes
- Share a clear mission
- Establish Key Result Areas
- Have a clearly defined goal that motivates team members
- Share a vision for the future
- Define operating principles
- Define processes, customers, suppliers, outputs, and inputs

Competence
- Strengths complement each other
- Right skill mix
- Listen effectively
- Each as a leader
- Hard working

The items shown here were developed as a result of brainstorming. Turn to p. 26 to view the brainstormed list from which this affinity diagram was developed

T

What does it do?
An affinity diagram is a group process that takes large amounts of language data such as ideas, opinions, and issues developed in brainstorming and divides them into categories. This tool can help you create order out of chaos.

When do you use it?
Use this tool when:
- A team needs to group many processes that it owns into Key Result Areas.
- Any group of issues needs to be categorized or simplified.

How do you do it?
1. Ask, "What are the issues surrounding _____?"
2. A team member writes the issues on POST-IT Notes and randomly places the notes on a large, flat surface.
3. In silence, the team moves the POST-IT Notes into groups to group issues that seem to be related (this should normally take no more than 5 to 10 minutes).
4. The team labels the groups by selecting an issue on a POST-IT Note that best seems to describe the group or by writing the category on a new POST-IT Note.

2. Benchmarking

A P V

What does it do?
This tool searches for the best practices that will help define superior performance of a product, service, or support process. Benchmarking may also be done for competitive products or services.

When do you use it?
Use this tool when an organization needs to:

- Have a concrete understanding of its competition so that it may become more competitive.
- Have goals that are credible and unarguable.
- Develop true measures of productivity.

How do you do it?

1. Identify what is to be benchmarked.
2. Identify the product, service, or support process with which comparisons are to be made.
3. Determine the methods of collecting data and then collect it.
4. Determine any gaps in performance between your product, service, or support process and that being benchmarked.
5. Communicate benchmark findings and establish improvement goals.
6. Develop, implement, and monitor action plans.
7. Re-examine previous benchmarks (i.e. Has "world class" gotten better?).[3]

[3] Paraphrased material from Robert C. Camp, *Benchmarking: The Search for Industry Best Practices That Lead to Superior Performance*. (Milwaukee, Wisc. Quality Press, American Society for Quality Control, 1989), p. 17. Reprinted with the permission of ASQC.

3. Brainstorming

A P D V

Characteristics of an Effective Team

- Strengths complement each other
- Have a clearly defined goal that motivates team members
- High self-esteem
- Play together
- Pitch in
- Hard working
- Establish Key Result Areas
- Share information
- Share responsibilities
- Right skill mix
- Share a vision for the future
- Put team before self
- Trust each other
- Define operating principles
- High regard for each other
- Share a clear mission
- Listen effectively
- Each as a leader
- Define processes, customers, suppliers, outputs, and inputs

What does it do?
Brainstorming is a group process for generating creative and diverse ideas. This method taps the creativity of the individuals in a group and lets group members build on each other's ideas.

When do you use it?
Use this tool:

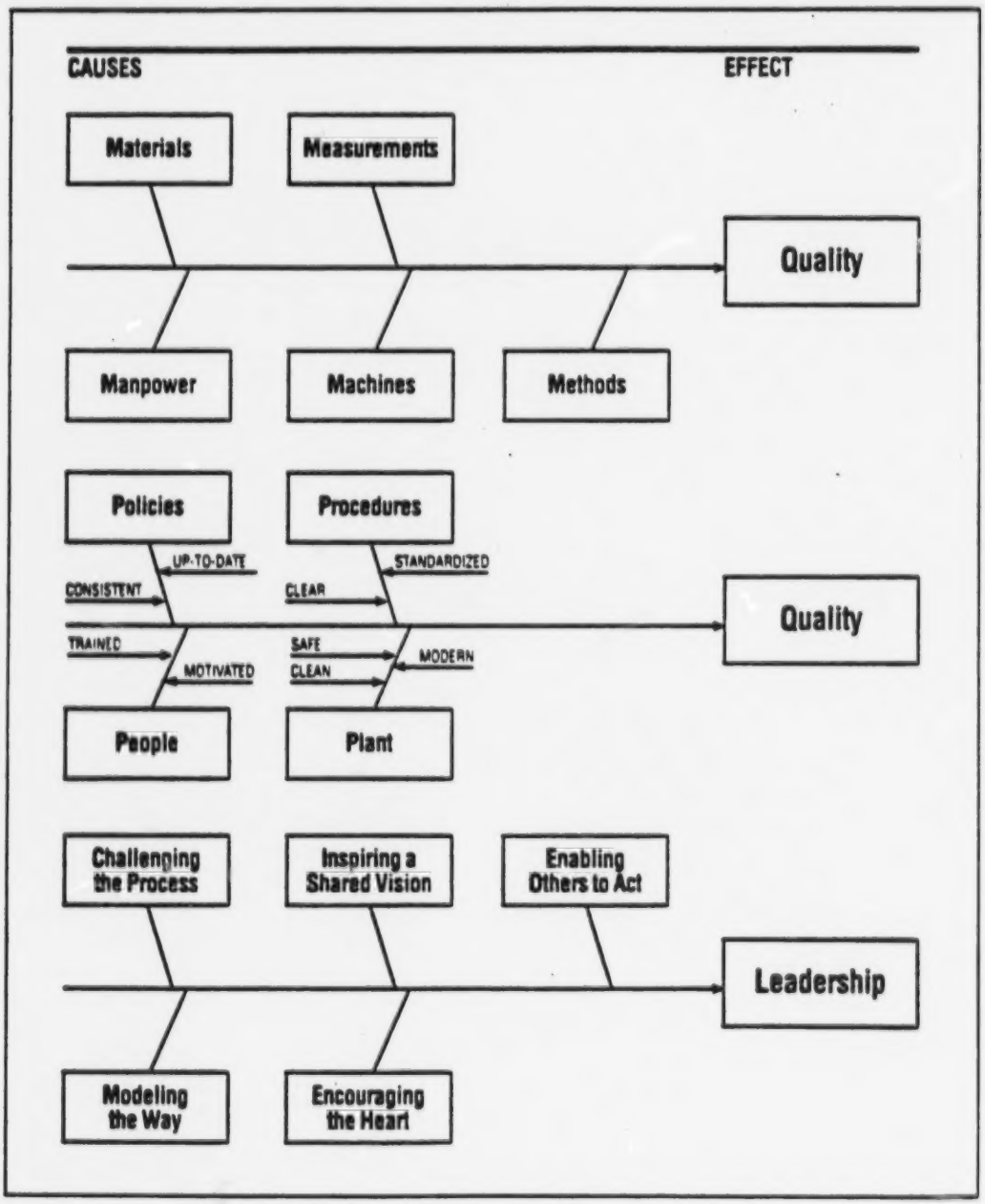
- When you want a broad range of ideas from a large or diverse group of people.
- To help get started on a problem. Frequently, use of this tool is a prerequisite for using other tools such as affinity diagrams, Pareto charts, or cause-and-effect diagrams. These tools help clarify, simplify, categorize, and prioritize brainstormed ideas.

How do you do it?

1. Carefully word the question to be brainstormed so that it is clear and focused. Check with the group to make sure there is shared understanding of the question.

2. Record all ideas on a flip chart or board that can be read by everyone in the group. When possible, record them in the words of the speaker.
3. Encourage people to volunteer every idea that occurs to them, no matter how silly or unusual it seems.
4. Do not discuss, criticize, or evaluate ideas during brainstorming. Ask questions only if an idea isn't clear enough to be recorded.
5. Allow one pause or lull in the flow of ideas. Usually the flow will pick up again. When ideas become redundant or infrequent, stop the process.

4. Cause-and-Effect (fishbone) Diagram P D V



What does it do?
This tool is used to identify possible causes of a problem by representing the relationship between some effect and its possible causes. In a manufacturing environment potential categories of causes around which a group may brainstorm include manpower, machines, methods, measurements, and materials (the five Ms). In a non-manufacturing environment, potential categories of causes include policies, procedures, people, and plant (the four Ps).

Construction of a cause-and-effect diagram does *not* solve a problem, but it does minimize the probability that any potential cause is overlooked. This tool is most effectively used by a group.

When do you use it?
Use this tool when you need to identify, explore, and display all of the possible causes of a specific problem or condition.

How do you do it?
1. Determine the characteristic to be studied.
2. Write this characteristic in a box on the right and draw the main arrow point toward the left side of the box.
3. Write the major factors that may be influencing (causing) the characteristic (effect) of interest. These factors may be related to the five Ms or the four Ps just discussed.
4. For each of the four or five major branches, write in the detailed factors that could be regarded as causes on separate or smaller branches.
5. Repeat the process until the group identifies the most likely cause or causes.
6. Using design of experiments or customer verification, make attempts to verify the root causes of the quality characteristic being studied.

5. Checksheet

PDV

What does it do?
The checksheet is a form that is used to record data as it is gathered. This form may be a chart or a graph. The checksheet provides a convenient way to record, analyze, and present results. Since the gathered data are displayed simply and directly, improvement opportunities may be identified without using additional tools.

Problem	Week 1	Week 2	Week 3	Total Problems Per Category
A	8	7	12	27
B	2	1	1	4
C	1	12	10	23
D	17	23	13	53
E	2	4	3	9
F	0	1	1	2
G	0	0	2	2
H	6	7	1	14
Total Problems Per Week	36	55	43	134

The data are usually in the form of discrete events.

When do you use it?
Use this tool when you need to:

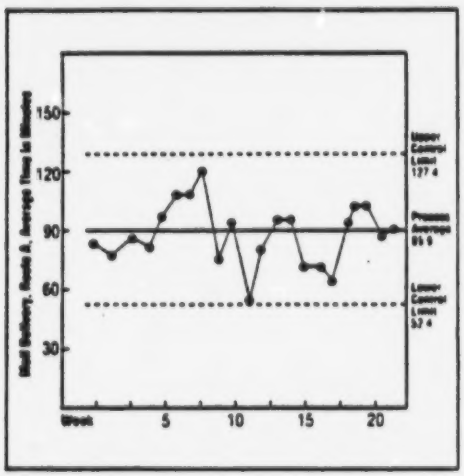
- Determine how often an event or events occur within a given period of time. This step is often necessary before problem solving can begin.
- Collect data before constructing a Pareto chart or a histogram.

How do you do it?

1. The team agrees on the event(s) to be counted and the time period during which this data will be collected.
2. The team designs an appropriate data collection form, which may be similar to that shown in the illustration.
3. The data are collected in a consistent manner.
4. As the collection of data continues, the checksheet is inspected to determine whether any patterns that would suggest an improvement opportunity exist.

6. Control Chart

A P D V



What does it do?
A control chart provides a convenient statistical method for distinguishing between common and special cause variation exhibited by processes. Common cause variation is the random (natural) variation intrinsic to a process. For example, say the process you want to measure is how long it takes to complete a mail delivery route within an office building. Common cause factors such as the alertness of the delivery personnel, the walking speed of the delivery personnel, the number of pieces of mail to be delivered, the length of breaks the delivery personnel take, and the timing of elevators used can all affect how long it takes to deliver the mail, although each of these factors has only a small impact.

Special cause variation results from factors that sporadically and unpredictably influence variation. In the same example we just looked at—how long it takes to complete a mail delivery route—special cause factors may be delivery personnel who are new on the job, mail that is incorrectly sorted, delivery personnel who become ill during the course of the delivery, and an elevator that needs to be used but is out of order.

It's important to distinguish between common cause variation and special cause variation because actions to improve processes may be quite different depending on what type of variation is present. Control charts use statistical calculations from the data to help distinguish between common cause and special cause variation.

When do you use it?
Use this tool when you need to:

- Define the process-dependent measures of a process.
- Obtain a quantitative understanding of process variability so that you can take steps to reduce it.
- Determine the stability of a process so that you can predict its future performance. If optimization is desired, consider using other statistical tools such as design of experiments.

How do you do it?
A basic knowledge of statistics is desirable when using this tool. Consult the *Resources* section for more information on using this tool.

T2.1

KODAK SKILLS ENHANCEMENT PROGRAM

APPLYING WRITTEN INFORMATION IN THE WORKPLACE

MODULE 2: TECHNIQUES FOR ACCESSING INFORMATION

OBJECTIVES:

- Identifying Reading Strategies
- Relevant & Irrelevant Information
- Skimming & Scanning
- Using sequence signal words
- Utilizing systems and subsystems

T2.2

KODAK SKILLS ENHANCEMENT PROGRAM

FOUR TECHNIQUES FOR ACCESSING INFORMATION

SKIMMING

SCANNING

SEQUENCING

SYSTEMS

T2.3

KCD
APPLYING WRITTEN INFORMATION IN THE WORKPLACE

ASSESS * PLAN * DO * VERIFY

1. ASSESS

2. PLAN

3. DO

4. VERIFY

SKIMMING AND SCANNING

This will be a timed test. You will have ten minutes to complete it.

Multiple Choice Choose the best answer from the selection given and write it on the line to the left.

_____ 1. Define skimming.
- A. Reading to find signal words to identify the order.
- B. Reading to identify the organizational structure.
- C. Reading quickly to find specific information.
- D. Reading quickly to get the general idea.

_____ 2. Define scanning.
- A. Reading to find signal words to identify the order.
- B. Reading to identify the organizational structure
- C. Reading quickly to find specific information.
- D. Reading quickly to get the general idea.

Scenario: You have been asked to look over the information on the Welcome to Kodak Colorado brochure to decide if you would be able to give a brief orientation on Kodak and KCD to a group of visiting business persons. Although the overview wouldn't be scheduled for several weeks, your decision is needed right away.

_____ 3. Which reading technique would you use?
- A. Skimming
- B. Scanning
- C. Sequencing
- D. Reading thoroughly

_____ 4. You are preparing to give the overview. Which reading technique would you use?
- A. Skimming
- B. Scanning
- C. Sequencing
- D. Reading thoroughly

_____ 5. You have the brochure with you while you are giving the orientation. The question is asked, "When did Eastman first form a company and what was the name of it?" Which reading technique would you use?

A. Skimming
B. Scanning
C. Sequencing
D. Reading thoroughly

_____ 6. You take a few moments and find the answer. (See page 3.) You respond,

A. "In the mid-1870's he formed Eastman Chemicals Company."
B. "In 1901 he formed Eastman Kodak Company."
C. "In 1881 he formed Eastman Dry Plate Company."
D. "In 1890 he formed Eastman Photography Company."

Follow the directions in each question below.

7. You're new to KCD and heard that you have access to the Medical Department. Underline the words which give you general information about the medical department on page 4.

8. You work a lot with chemicals and want to know if the Medical Department can let you know if they are affecting you adversely. **Circle** the words on page 4 which answer your question.

9. You know Kodak has a recycling program and want to know more about it. Underline the words which give you the general information about it on page 4.

10. You want to know if you can recycle computer paper through PPI. **Circle** the words on page 4 which answer your question.

GETTING TO KNOW OUR MEDICAL DEPARTMENT

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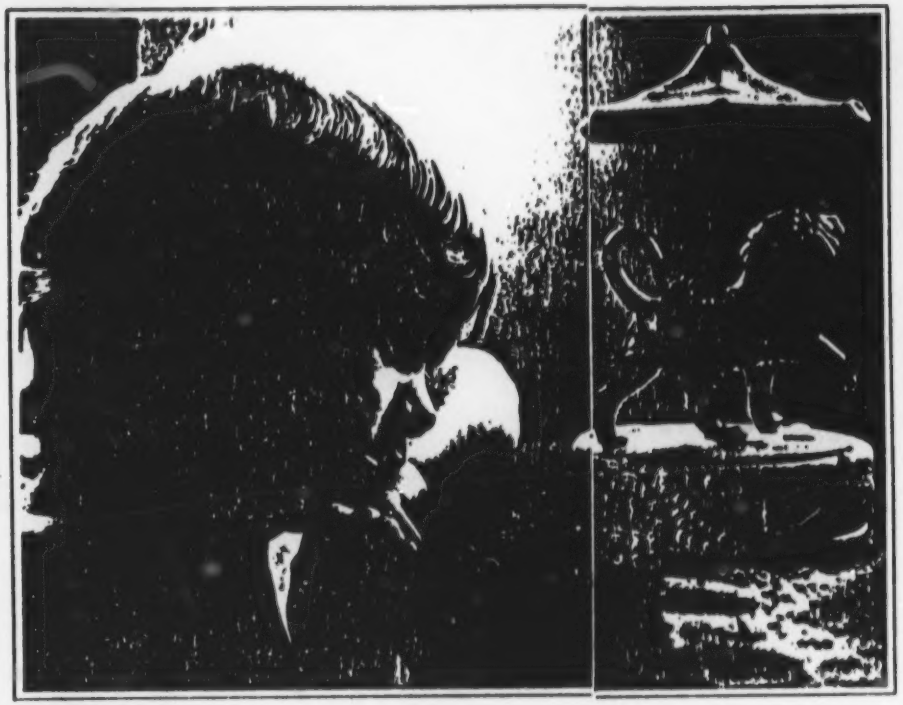
Page 3

Introduction

When you take a snapshot—perhaps of your child's first birthday, your son's graduation, your daughter's wedding, your grandparent's 50th anniversary—you are capturing a moment that will never happen again. As long as you live, you can never again experience that event. Through the magic of photography, however, you can relive the happy memories for years to come.

Photography is a powerful medium capable of provoking strong emotions, from extremes of joy, to that nice warm feeling that comes with happy memories, to bittersweet nostalgia. It can be a form of artistic expression to inspire awe in the grandeur of the universe. It can see things the eye cannot see by stopping time, speeding it up, or slowing it down. It can be an invaluable aid to the researcher and a useful tool in industry and health care.

The fraction of a second in which the image is recorded on film is the tiniest link in a complex chain of physical and chemical events that must fall into place precisely if all is to work together correctly.



(On the cover)
Entrance to Kodak Colorado Division Administration Building, C-41.

Kodak wants to help make sure that you are pleased with the pictures of your child's first birthday, that publishers are satisfied with the quality of the offset-printed product you are going to read, that microfilm copies are truly accessible for records purposes, that doctors are able to interpret your x-rays with confidence, that millions of people using film and paper in thousands of applications are satisfied with their results. Kodak wants your pictures to look the way you want them.

For more than a century, Kodak people have prided themselves on their ability to make photographic products that serve consumers well. Today, they continue to work hard to merit your continued trust.

This, first, is Kodak's story. Then, more particularly, it's the story of the Kodak Colorado Division.

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The Beginning

In the mid-1870s, a young man named George Eastman decided to try simplifying the then-cumbersome, 40-year-old craft of photography. Starting at his mother's sink and later expanding to the loft of a small building, the young inventor first developed a simpler way of coating a more permanent light-sensitive photographic emulsion on the glass plates then in use as picture-taking material. Later, he replaced the glass with a light, flexible support substance that is basically what we know today as film.

In 1881, he formed the Eastman Dry Plate Company and set out on a pursuit that eventually was to make photography available to most everyone, not just the professional lensman or the wealthy dabbler. He introduced his first Kodak camera and roll film, capable of taking 100 pictures, in 1888. In 1901, the present Eastman Kodak Company was incorporated.

Kodak's corporate headquarters and its two largest photographic manufacturing divisions are located in Rochester. The Kodak Apparatus Division is responsible for the "hardware" side of the business: cameras, projectors, and equipment; while the Kodak Park Site is responsible for the software side of photography: film, papers and chemicals.

Kodak Colorado is a division of the Worldwide Sensitized Goods Manufacturing Organization and operates as the western extension of the Kodak Park Site.

Kodak Colorado is the company's primary manufacturing center for medical x ray film and aluminum lithographic printing plates. It also engages in some of the stages of manufacturing a variety of other photographic films and papers. Established in 1958, it is the company's only sensitized goods manufacturing facility in the United States outside Rochester.

George Eastman, founder of the Eastman Kodak Company.

KODAK SKILLS ENHANCEMENT PROGRAM

APPLYING WRITTEN INFORMATION IN THE WORKPLACE

MODULE 3: Using and Understanding Graphically Displayed Material

Objective: To enhance the reader's ability to interpret and understand various types of graphically displayed materials.

Background: The workplace communicates enormous amounts of information on graphs and charts. Graphs and charts are often used to present complex material in a concise format. The information on these charts and graphs relays critical information about the business that all workers should be aware of. However, if workers do not clearly have the skills to interpret charts and graphs, valuable information could be lost.

INTRODUCE OBJECTIVES/CONCEPTS

Introduction Activity to raise awareness of the effectiveness of graphically displayed material.

Introduce objectives — **T3.1 (LB 3.1)**

Introduce reading **forms** — **T 3.2 (LB 3.2)**
- Model finding information on reading forms
- Ask appropriate questions to have participants find information on form — **T 3.3 (LB 3.3)**
- Group work on reading forms — **LB 3.4**

Introduce reading **charts/line graphs** — **T 3.5 (LB 3.5)**
- Model how information is read from charts
- Ask appropriate questions to have participants find information on charts--discuss both axis
- Group practice reading charts — **T 3.6 (LB 3.6)**
- Individual practice with charts — **T 3.7-3.11 (LB 3.7-3.11)**

Introduce **fishbone diagrams** — **T 3.12 (LB 3.12)**
- Model constructing a fishbone diagram
- Model reading a fishbone diagram from work
- Group practice reading and constructing fishbone diagrams

Introduce **flow charts** T. 3.13 (LB 3.13)

Discuss symbols on flow charts

Model constructing a flowchart LB 3.14

Ask participants to work in pairs constructing flow charts of a procedure from their work area

Model reading a complex flowchart asking and answering questions about the procedure LB 3.15

Paired practice reading flowcharts: pairs develop questions about the process to ask peers LB 3.16

Individual practice: ask questions for individuals to answer about the process LB 3.17

KODAK SKILLS ENHANCEMENT PROGRAM

APPLYING WRITTEN INFORMATION IN THE WORKPLACE

MODULE 3: CHARTS, GRAPHS AND VISUALS

OBJECTIVES:

TO PRACTICE EFFECTIVE READING TECHNIQUES, DISCUSS THINKING STRATEGIES AND/OR LEARN HOW TO DESIGN:

- **FORMS**
- **CHARTS**
- **BAR GRAPHS**
- **PARETO DIAGRAMS**
- **FISHBONE DIAGRAMS**
- **LINE OR RUN CHARTS**
- **FLOW CHARTS**

Section V — Reactivity Data

Stability			
LB 3.3	Unstable		Conditions to Avoid
	Stable	X	Heat, flame or sparks

Incompatibility (*Materials to Avoid*)
Strong oxidizers

Hazardous Decomposition or Byproducts
CO and aliphatic aldehydes

Hazardous Polymerization			
	May Occur		Conditions to Avoid
	Will Not Occur	X	

Section VI — Health Hazard Data

Route(s) of Entry:	Inhalation?	Skin?	Ingestion?
	Yes	No	Yes

Health Hazards (*Acute and Chronic*)
Slightly toxic if swallowed.

Carcinogenicity:	NTP?	IARC Monographs?	OSHA Regulated?
	N/A	N/A	N/A

Signs and Symptoms of Exposure
May cause eye irritation or dizziness; solvent action will defat skin.

Medical Conditions
Generally Aggravated by Exposure N/A

Emergency and First Aid Procedures
Remove from exposure. Flush eyes and skin with water. Call a physician.

Section VII — Precautions for Safe Handling and Use

Steps to Be Taken in Case Material is Released or Spilled
Remove ignition sources. Keep people away; add absorbant to spill area. Avoid breathing vapors; ventilate closed areas.

Waste Disposal Method
Incinerate absorbed materials. Waste disposal must be in accordance with applicable federal, state and local regulations.

Precautions to Be Taken in Handling and Storing
Keep containers closed. Store indoors.

Other Precautions
Red lable flammable - treat accordingly.

Section VIII — Control Measures

Respiratory Protection (*Specify Type*)
None required. Although should avoid prolonged breathing of fumes.

Ventilation		
	Local Exhaust: Preferable	Special: N/A
	Mechanical (General): Acceptable	Other: N/A

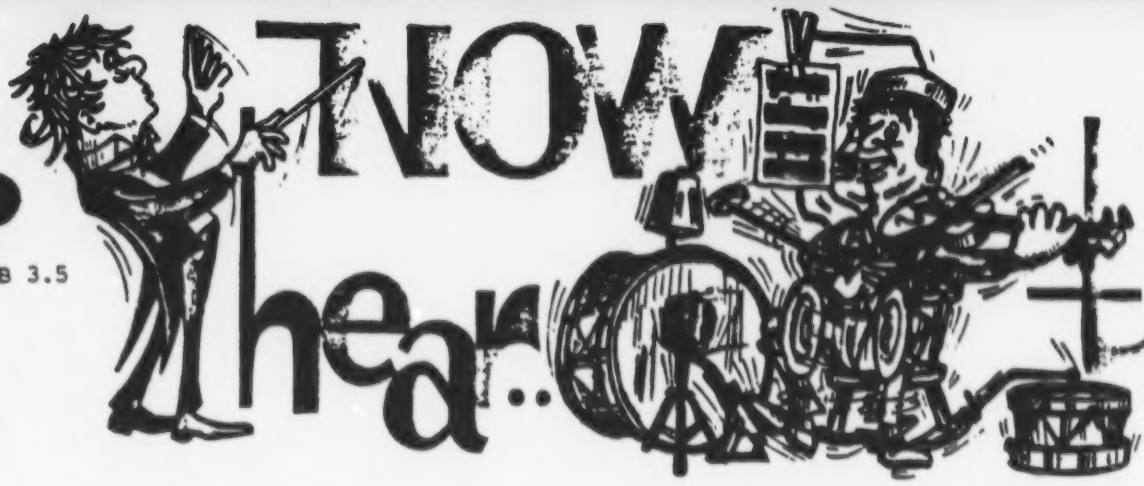
Protective Gloves	Eye Protection
Solvent resistant gloves	Safety glasses

Other Protective Clothing or Equipment
Solvent resistant apron.

Work/Hygienic Practices
General hygienic practices for working with/around chemicals.

FM0661

LB 3.5



KCD CREDIT UNION

FEATURES: HIGH YIELD CERTIFICATES

- ALL CERTIFICATES EXCEPT 6 MONTH ARE PAID SEMI-ANNUALLY
- INTEREST CAN NOW BE PAID EITHER INTO - REGULAR SAVINGS OR CERTIFICATE
- EFFECTIVE YIELDS ARE STATED IN ADDITION TO APR'S

NEW RATES, YIELDS & TERMS:

TERM	A.P.R.	EFFECTIVE YIELD	MINIMUM	INTEREST PAYME
6 MONTH	3.87%	3.9%	$250-	ON MATURITY
12 MONTH	4.06%	4.1%	$500-	SEMI-ANNUALLY
18 MONTH	4.26%	4.3%	$500-	SEMI-ANNUALLY
24 MONTH	4.45%	4.5%	$1,000-	SEMI-ANNUALLY
30 MONTH	4.75%	4.8%	$1,000-	SEMI-ANNUALLY
36 MONTH	5.04%	5.1%	$1,000-	SEMI-ANNUALLY

- CERTIFICATES ARE AVAILABLE TO CREDIT UNION MEMBERS ONLY.
- THERE SHALL BE NO PARTIAL WITHDRAWALS.
- THESE CERTIFICATES ARE NON-RENEWABLE, PRIOR TO MATURITY DATE THE MEMBER WILL RECEIVE NOTIFICATION WITH THE FOLLOWING INFORMATION: AMOUNT OF INTEREST TO B PAID, THE MATURITY DATE AND OPTIONS AVAILABLE AFTER THE CERTIFICATE HAS BEEN PLACED INTO THE REGULAR SHARE ACCOUNT.
- THESE CERTIFICATES MAY BE USED FOR COLLATERAL ON LOANS AT THE CREDIT UNIO THE INTEREST RATE ON LOANS WILL BE 2.0% OVER THE RATE OF CERTIFICATE. TH LOAN WILL BE SET UP FOR THE TERM OF THE CERTIFICATE OR THE CERTIFICATE CA BE SET UP FOR THE TERM OF THE LOAN.

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Each member account insured to $100,000-, by the NCUA.

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LB 3.6

WEATHER EMERGENCY ANNOUNCEMENTS

FOR THE 1991 - 1992 SEASON

KCD EMPLOYEES ARE REQUESTED TO LISTEN TO THE FOLLOWING RADIO STATIONS DURING PERIODS OF BAD WEATHER FOR ANNOUNCEMENTS MADE CONCERNING PLANT CLOSURE DUE TO SEVERE WEATHER:

TRI-CITY AREA	TRI-102	102.5 FM
FORT COLLINS	KCOL/KIMN	1410 AM / 107.9 FM
WINDSOR	KUAD	99FM
DENVER	KOA	850 AM

ALL STATIONS BROADCAST 24 HOURS PER DAY

ALL STATIONS WILL ANNOUNCE OPENINGS & CLOSURES EVERY 10 TO 30 MINUTES AND WILL INTERRUPT REGULAR PROGRAMMING TO MAKE THESE ANNOUNCEMENTS

TO ASSIST IN KEEPING ANNOUNCEMENTS UP-TO-DATE,

PLEASE DO NOT CALL THE RADIO STATIONS OR KODAK

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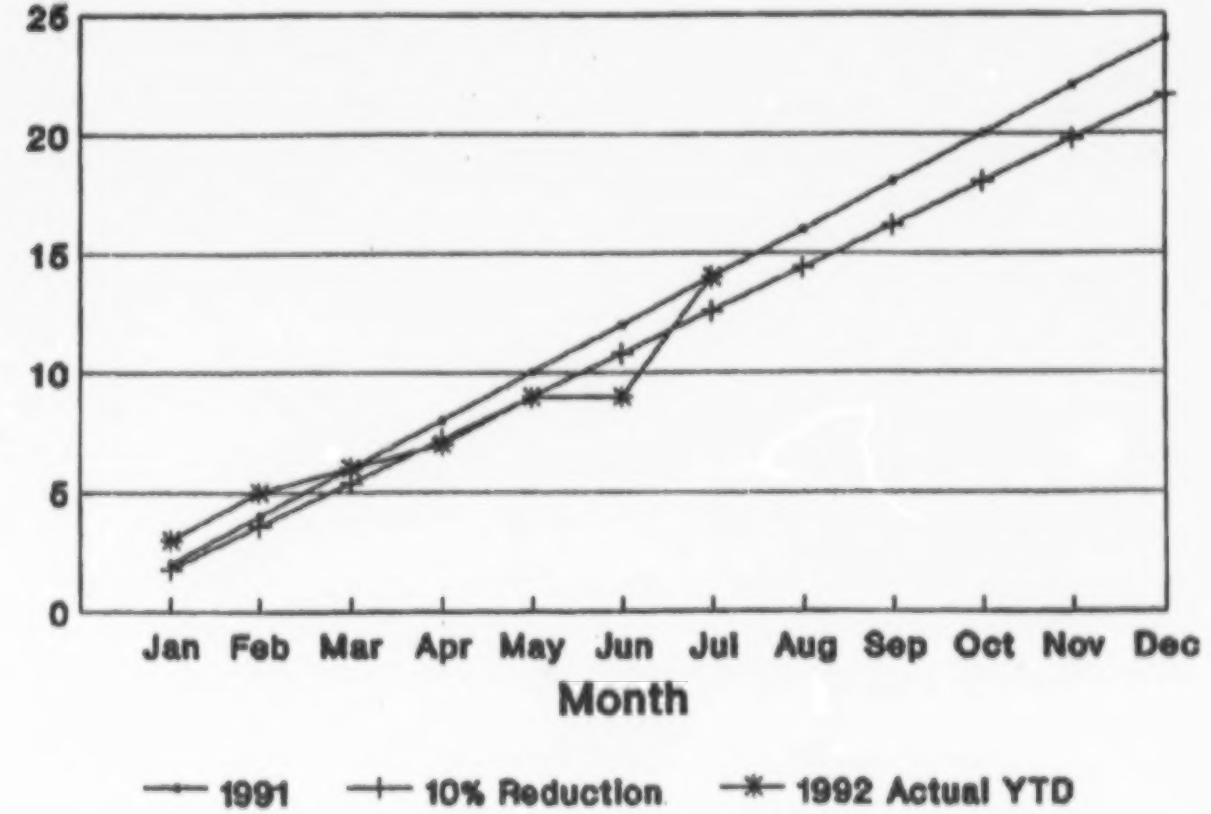
To Gayle Landham | From C. Keeler

Co. SEP | Co. RTS

Dept. | Phone # 4201

Fax # 5412 | Fax # 4435

GRAPHICS SAFETY PERFORMANCE



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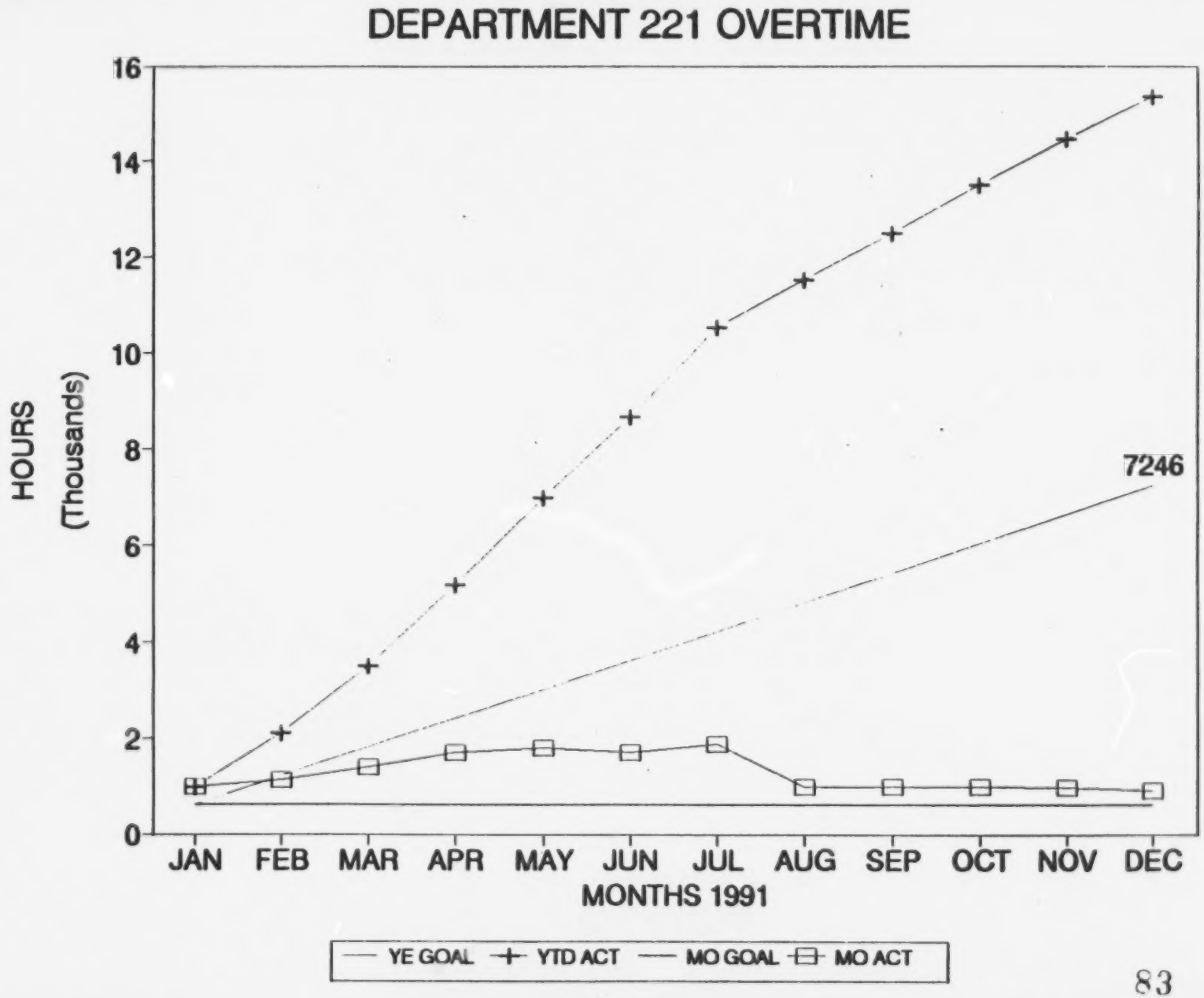
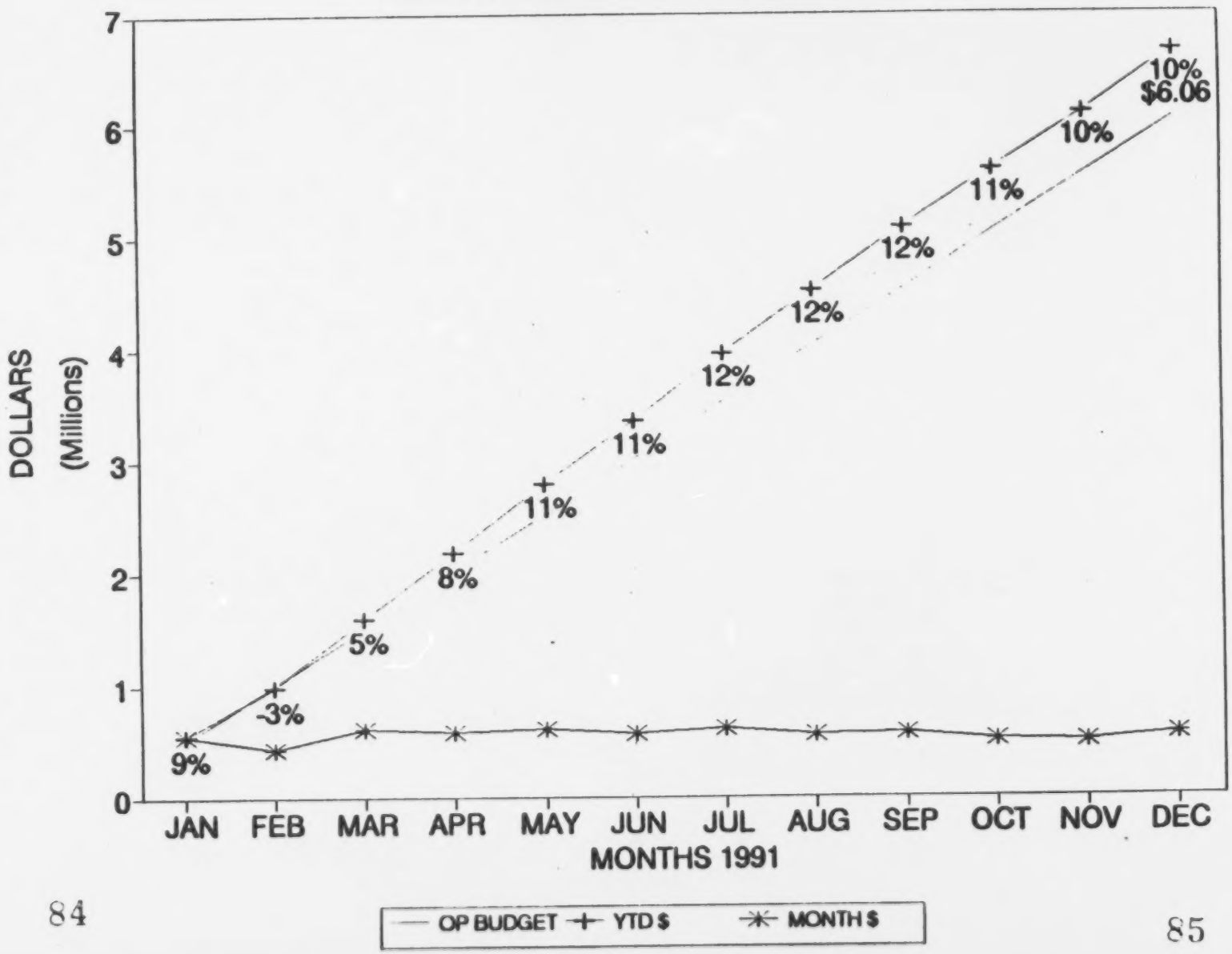

DEPARTMENT 221 OVERTIME
HOURS
(Thousands)
16
14
12
10
8
6
4
2
0
7246
JAN
FEB
MAR
APR
MAY
JUN
JUL
AUG
SEP
OCT
NOV
DEC
MONTHS 1991
YE GOAL
YTD ACT
MO GOAL
MO ACT

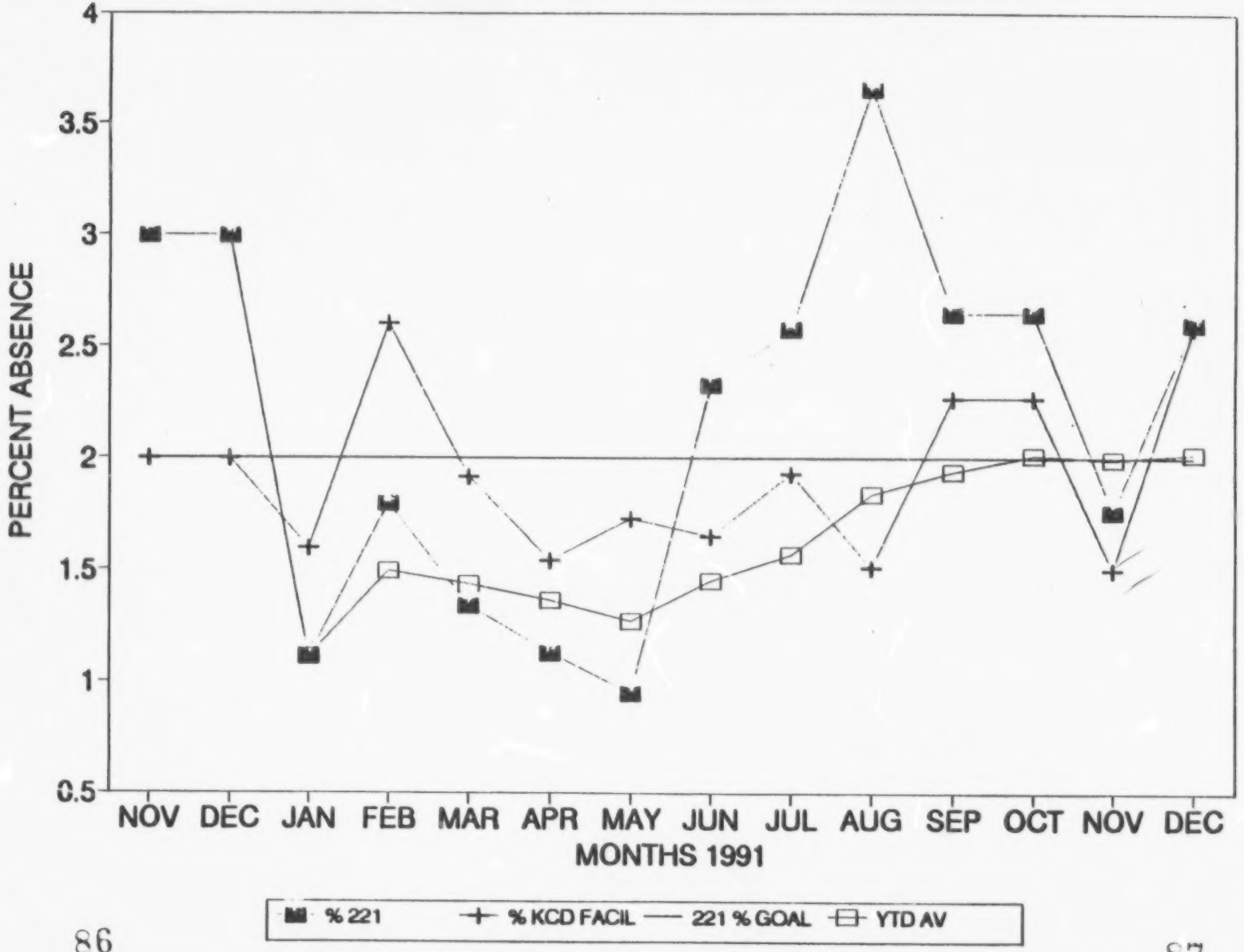
LB 3.8

DEPARTMENT 221 BUDGET



LB 3.9

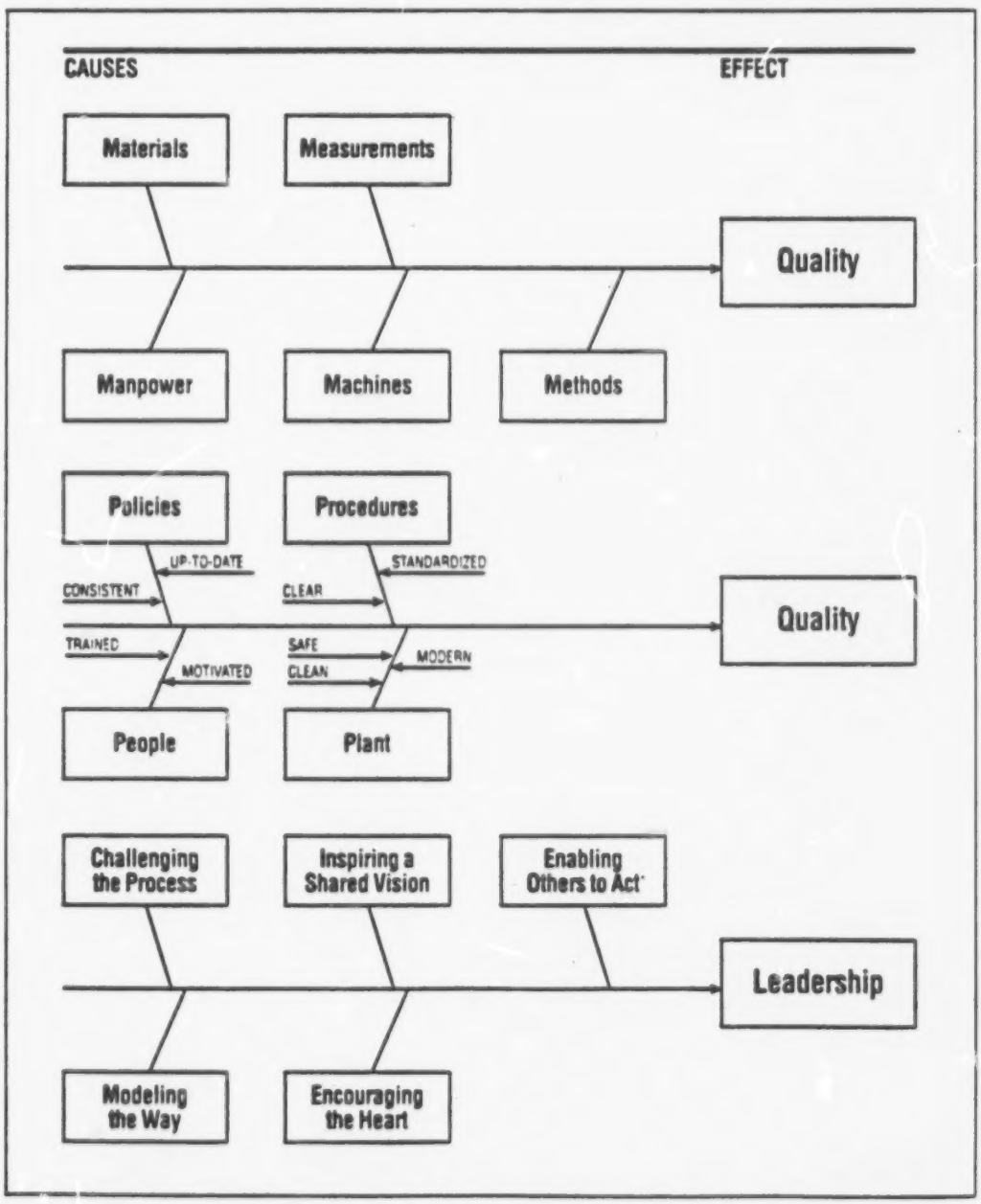
DEPARTMENT 221 PERCENT ABSENCE



LB 3.10

2. Record all ideas on a flip chart or board that can be read by everyone in the group. When possible, record them in the words of the speaker.
3. Encourage people to volunteer every idea that occurs to them, no matter how silly or unusual it seems.
4. Do not discuss, criticize, or evaluate ideas during brainstorming. Ask questions only if an idea isn't clear enough to be recorded.
5. Allow one pause or lull in the flow of ideas. Usually the flow will pick up again. When ideas become redundant or infrequent, stop the process.

4. Cause-and-Effect (fishbone) Diagram PDV



FLOW CHARTS

1. DECIDE ON START AND END POINTS FOR THE PROCESS.
   MARK WITH A CIRCLE

2. LIST EACH STEP IN THE PROCESS.
   MARK WITH A RECTANGLE.

3. IDENTIFY DECISION MAKING POINTS.
   MARK WITH A DIAMOND.

4. MARK THE DIRECTION OF PROCESS FLOW WITH ARROWS.

KODAK SKILLS ENHANCEMENT PROGRAM

APPLYING WRITTEN INFORMATION IN THE WORKPLACE

Create a flow chart to describe the following process graphically:

AFTER THE GREEN LIGHT GOES OUT (INDICATING THE PROGRAM IS FINISHED RUNNING) PRESS "ENTER". REPEAT THIS STEP UNTIL THE PROGRAM HAS RUN THREE TIMES.

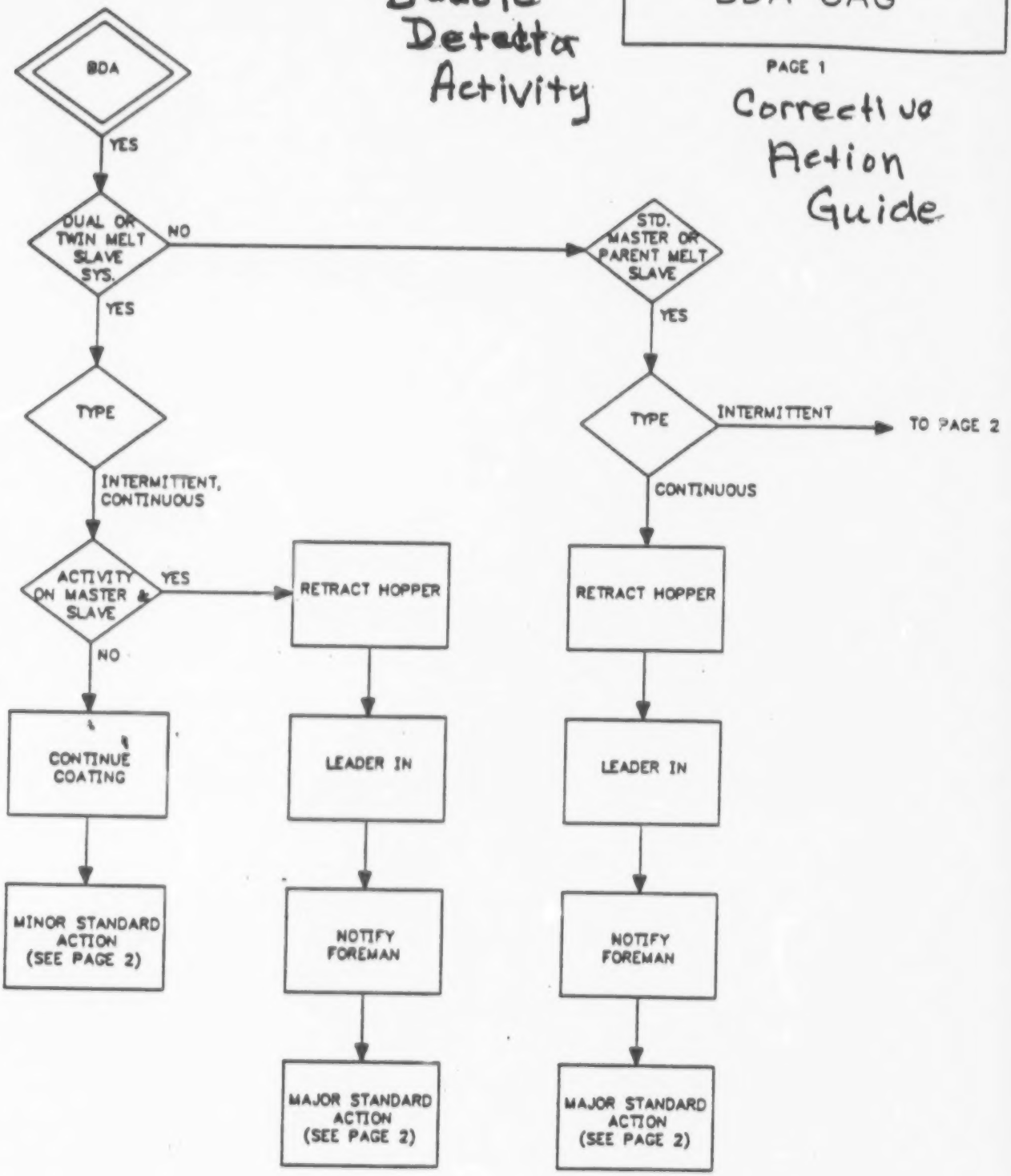
LB 3.15

Bubble Detector Activity

BDA CAG

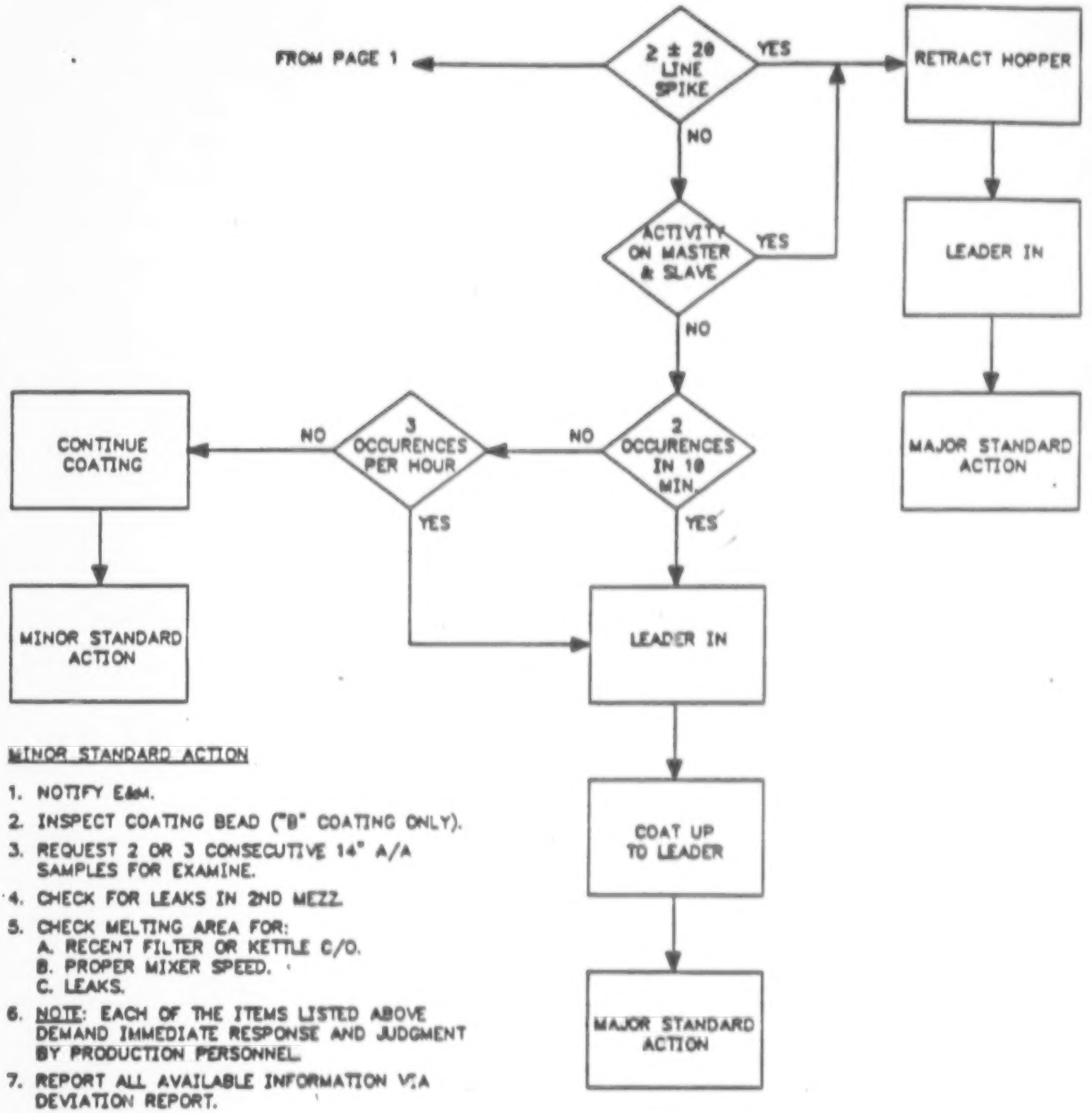
PAGE 1

Corrective Action Guide



BDA CAG

PAGE 2



MINOR STANDARD ACTION

1. NOTIFY E&M.
2. INSPECT COATING BEAD ("B" COATING ONLY).
3. REQUEST 2 OR 3 CONSECUTIVE 14" A/A SAMPLES FOR EXAMINE.
4. CHECK FOR LEAKS IN 2ND MEZZ.
5. CHECK MELTING AREA FOR:
   A. RECENT FILTER OR KETTLE C/O.
   B. PROPER MIXER SPEED.
   C. LEAKS.
6. NOTE: EACH OF THE ITEMS LISTED ABOVE DEMAND IMMEDIATE RESPONSE AND JUDGMENT BY PRODUCTION PERSONNEL.
7. REPORT ALL AVAILABLE INFORMATION V:A DEVIATION REPORT.

MAJOR STANDARD ACTION

(TO BE USED WHEN COATING IS DISCONTINUED)

1. NOTIFY E&M IMMEDIATELY.
2. DROP SYSTEM BACK TO RECYCLE.
3. FOLLOW ALL MINOR STANDARD ACTIONS.
4. INSTALL PORTABLE BUBBLE DETECTOR.
5. CHANGE ALL GEON WASHERS IN THE ECR & CVD RECYCLE LOOPS.
6. CHANGE FINAL FILTER.
7. TAKE THREE ECR FLUSHES.

FOOTNOTE:

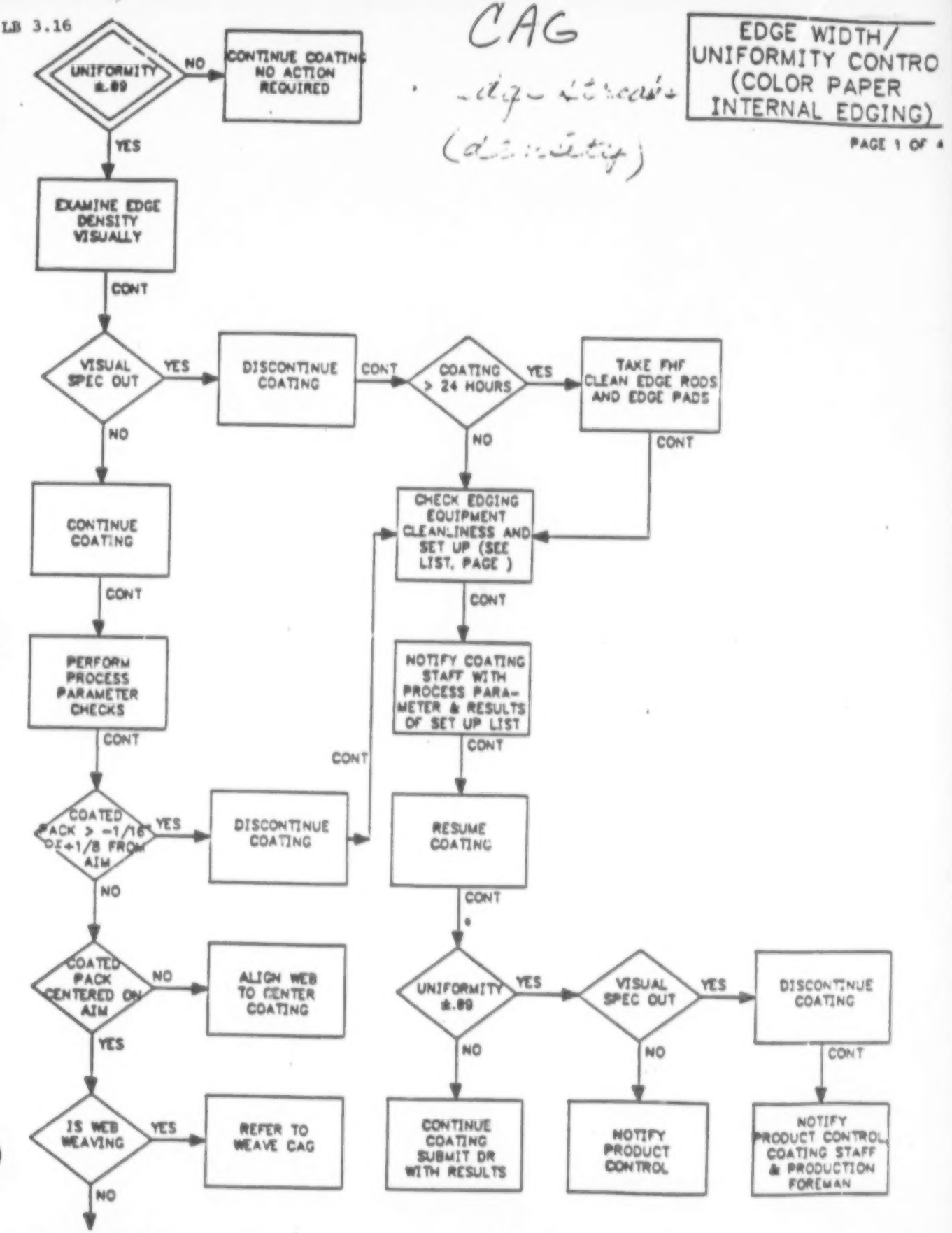
REACT TO ALL BDA ALARMS AS BEING REAL (AUDIBLE, COMPUTER, CHART). IF ONE OF THE ABOVE ALARMS ARE ACTIVE, FOLLOW CAG.

LB 3.16

CAG

- dip-coats
(density)

EDGE WIDTH/ UNIFORMITY CONTRO (COLOR PAPER INTERNAL EDGING)



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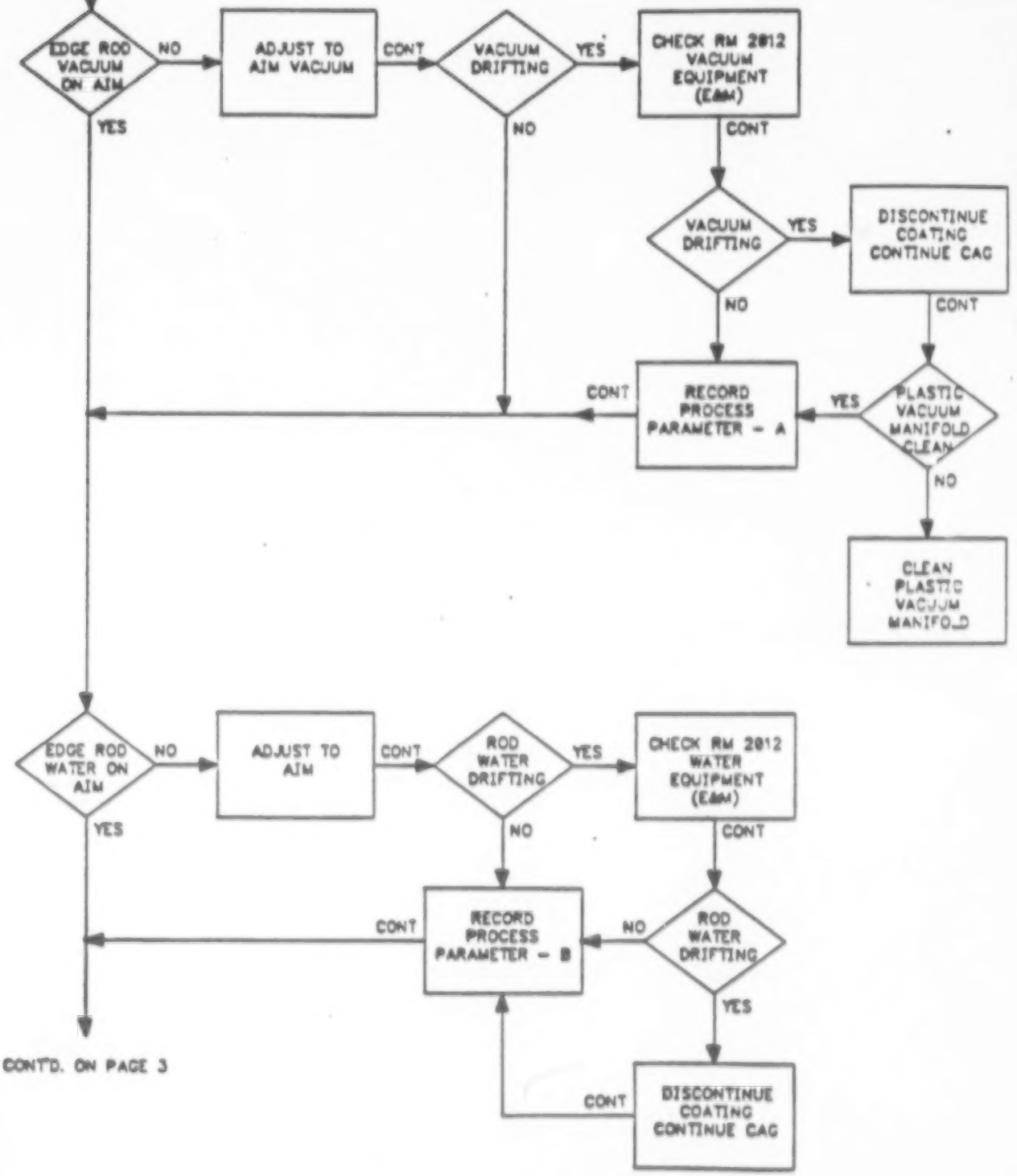
EDGE WIDTH/ UNIFORMITY CONTRO (COLOR PAPER INTERNAL EDGING)

CONT'D. FROM PAGE 1



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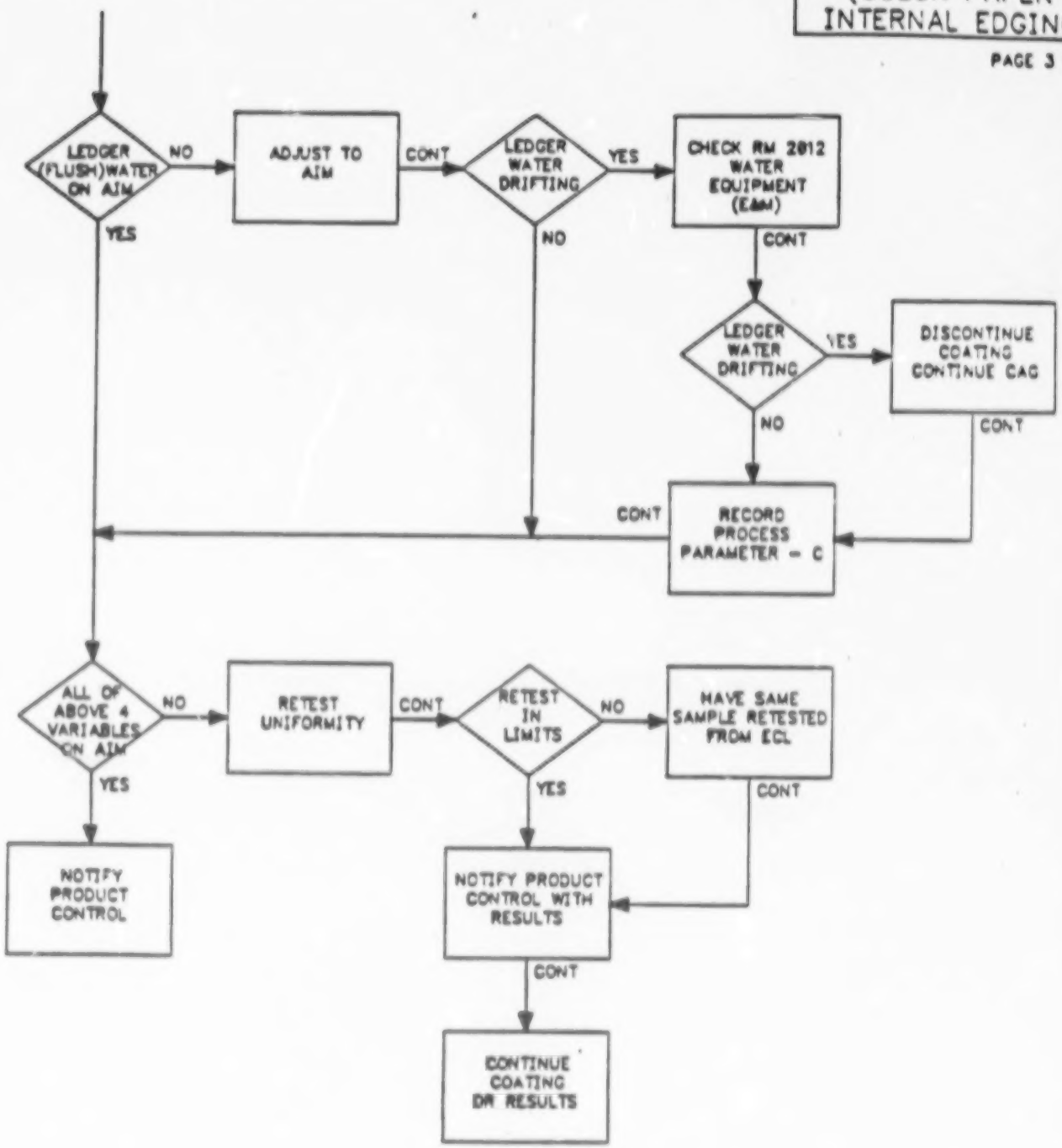
EDGE WIDTH/ UNIFORMITY CONTROL (COLOR PAPER INTERNAL EDGING)



T3.1

KODAK SKILLS ENHANCEMENT PROGRAM

APPLYING WRITTEN INFORMATION IN THE WORKPLACE

MODULE 3: CHARTS, GRAPHS AND VISUALS

OBJECTIVES:

TO PRACTICE EFFECTIVE READING TECHNIQUES, DISCUSS THINKING STRATEGIES AND/OR LEARN HOW TO DESIGN:

- FORMS
- CHARTS
- BAR GRAPHS
- PARETO DIAGRAMS
- FISHBONE DIAGRAMS
- LINE OR RUN CHARTS
- FLOW CHARTS

Thiokol/Ventron Division
Alfa Products

T3.2

MATERIAL SAFETY DATA SHEET

$Cu_2P_2O_7.3H_2O$

PRODUCT NAME: Copper(II) pyrophosphate

CHEMICAL NATURE: phosphate

% ACTIVITY: 97+%

I. PHYSICAL DATA

BOILING POINT, 760 mm. Hg	No data	FREEZE POINT	No data
SPECIFIC GRAVITY	No data	VAPOR PRESSURE AT 20°C.	No data
VAPOR DENSITY	Not applicable	SOLUBILITY IN H_2O	No data
PER CENT VOLATILES BY WEIGHT	Not applicable	IONIC NATURE	No data
APPEARANCE AND ODOR	Bluish Crystals		

II. HAZARDOUS INGREDIENTS

MATERIAL	%	TLV (Unit
Copper(II) Pyrophosphate	97+%	Not dete

III. FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (test method)	No data	AUTOIGNITION TEMPERATURE			No data
FLAMMABLE LIMITS IN AIR, % by volume	No data	LOWER		UPPER	

EXTINGUISHING MEDIA	Use water, carbon dioxide, dry chemical extinguishing agents, dr sand, or dry ground dolomite.
SPECIAL FIRE FIGHTING PROCEDURES	Wear NIOSH/MSHA approved self contained breathing apparatus, & chemical resistant clothing; hats, boots & gloves. If witho risk, remove material from fire area. Cool containers with wa from maximum distance.
UNUSUAL FIRE AND EXPLOSION HAZARDS	Can emit highly toxic fumes of PO_x

T 3.3

Section V — Reactivity Data

Stability	Unstable		Conditions to Avoid
	Stable	X	Heat, flame or sparks

Incompatibility (*Materials to Avoid*)
Strong oxidizers

Hazardous Decomposition or Byproducts
CO and aliphatic aldehydes

Hazardous Polymerization	May Occur		Conditions to Avoid
	Will Not Occur	X	

Section VI — Health Hazard Data

Route(s) of Entry:	Inhalation?	Skin?	Ingestion?
	Yes	No	Yes

Health Hazards (*Acute and Chronic*)
Slightly toxic if swallowed.

Carcinogenicity:	NTP?	IARC Monographs?	OSHA Regulated?
	N/A	N/A	N/A

Signs and Symptoms of Exposure
May cause eye irritation or dizziness; solvent action will defat skin.

Medical Conditions
Generally Aggravated by Exposure N/A

Emergency and First Aid Procedures
Remove from exposure. Flush eyes and skin with water. Call a physician.

Section VII — Precautions for Safe Handling and Use

Steps to Be Taken in Case Material is Released or Spilled
Remove ignition sources. Keep people away; add absorbant to spill area. Avoid breathing vapors; ventilate closed areas.

Waste Disposal Method
Incinerate absorbed materials. Waste disposal must be in accordance with applicable federal, state and local regulations.

Precautions to Be Taken in Handling and Storing
Keep containers closed. Store indoors.

Other Precautions
Red lable flammable - treat accordingly.

Section VIII — Control Measures

Respiratory Protection (*Specify Type*)
None required. Although should avoid prolonged breathing of fumes.

Ventilation		
	Local Exhaust: Preferable	Special: N/A
-	Mechanical (General): Acceptable	Other: N/A

Protective Gloves: Solvent resistant gloves	Eye Protection: Safety glasses

Other Protective Clothing or Equipment
Solvent resistant apron.

Work/Hygienic Practices
General hygienic practices for working with/around chemicals.

FM0661

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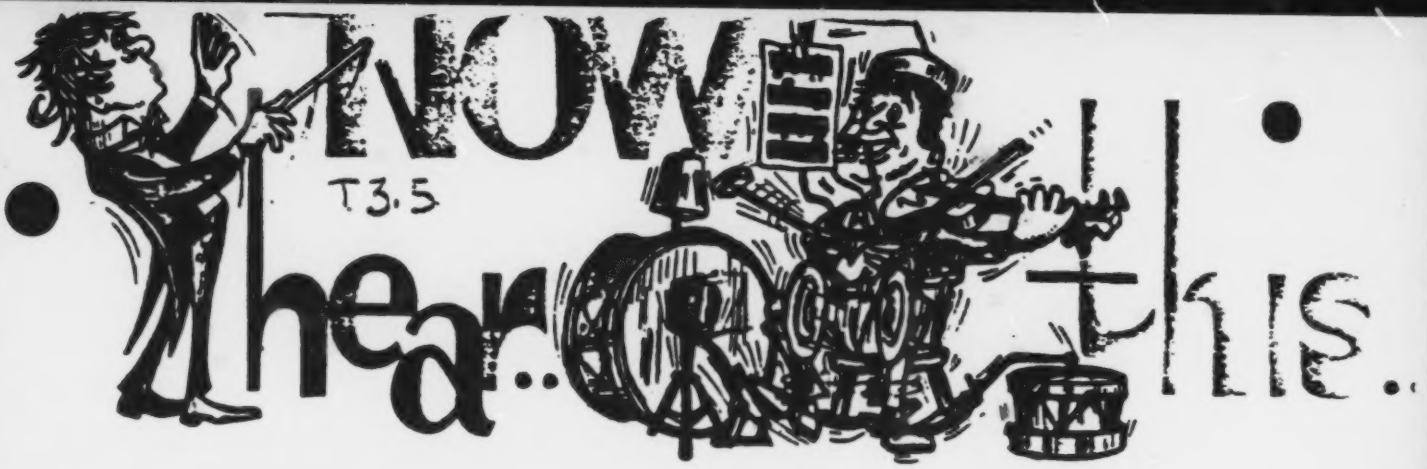

KCD CREDIT UNION

FEATURES: HIGH YIELD CERTIFICATES

- ALL CERTIFICATES EXCEPT 6 MONTH ARE PAID SEMI-ANNUALLY
- INTEREST CAN NOW BE PAID EITHER INTO - REGULAR SAVINGS OR CERTIFICATE
- EFFECTIVE YIELDS ARE STATED IN ADDITION TO APR'S

NEW RATES, YIELDS & TERMS:

TERM	A.P.R.	EFFECTIVE YIELD	MINIMUM	INTEREST PAYMENT
6 MONTH	3.87%	3.9%	$250-	ON MATURITY
12 MONTH	4.06%	4.1%	$500-	SEMI-ANNUALLY
18 MONTH	4.26%	4.3%	$500-	SEMI-ANNUALLY
24 MONTH	4.45%	4.5%	$1,000-	SEMI-ANNUALLY
30 MONTH	4.75%	4.8%	$1,000-	SEMI-ANNUALLY
36 MONTH	5.04%	5.1%	$1,000-	SEMI-ANNUALLY

- CERTIFICATES ARE AVAILABLE TO CREDIT UNION MEMBERS ONLY.
- THERE SHALL BE NO PARTIAL WITHDRAWALS.
- THESE CERTIFICATES ARE NON-RENEWABLE, PRIOR TO MATURITY DATE THE MEMBER WILL RECEIVE NOTIFICATION WITH THE FOLLOWING INFORMATION: AMOUNT OF INTEREST TO BE PAID, THE MATURITY DATE AND OPTIONS AVAILABLE AFTER THE CERTIFICATE HAS BEEN PLACED INTO THE REGULAR SHARE ACCOUNT.
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EFFECTIVE 7-13-92

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T3.6

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FOR THE 1991 - 1992 SEASON

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WINDSOR	KUAD	99FM
DENVER	KOA	850 AM

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TO ASSIST IN KEEPING ANNOUNCEMENTS UP-TO-DATE.

PLEASE DO NOT CALL THE RADIO STATIONS OR KODAK

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T3.7

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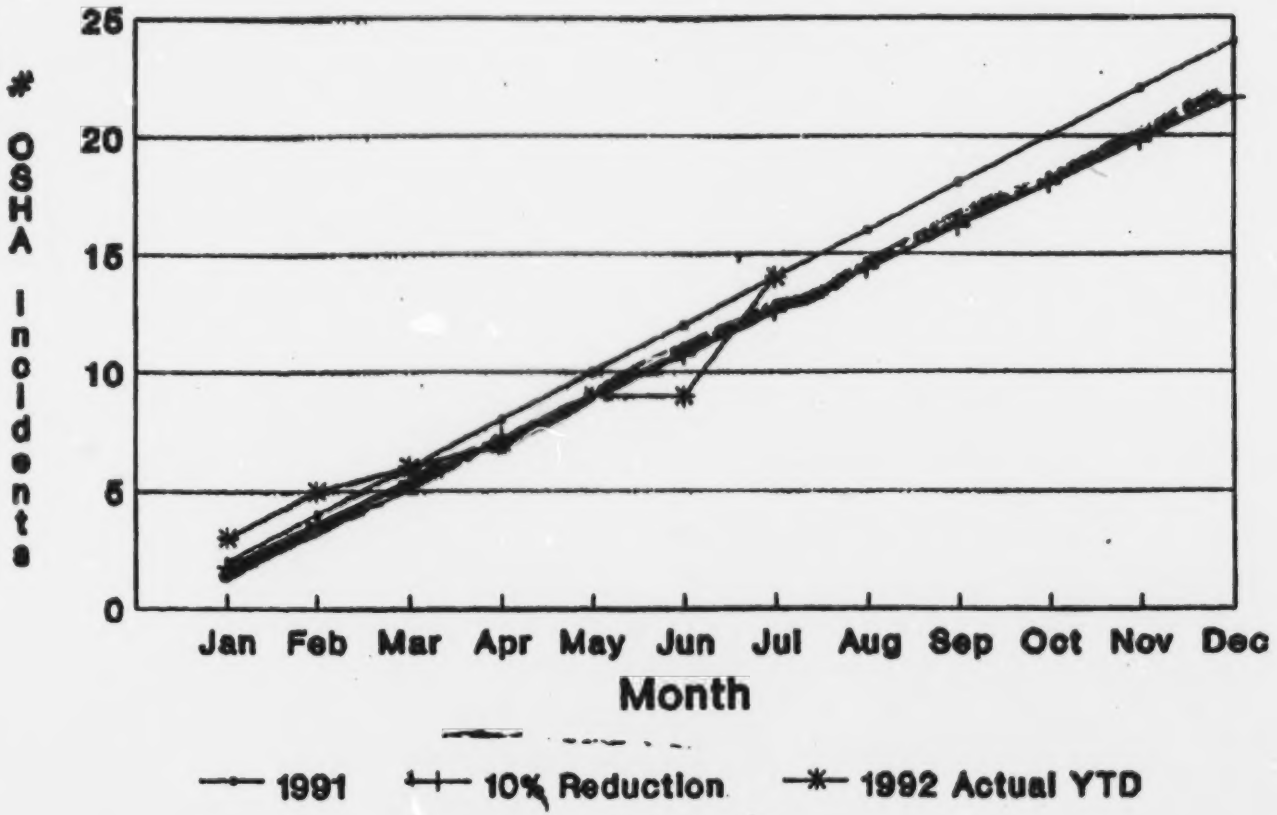
To Gayle Latham | From C. Keese

Co. SEP | Co. T3

Dept. | Phone # 4201

Fax # 44482 | Fax # 4438

GRAPHICS SAFETY PERFORMANCE



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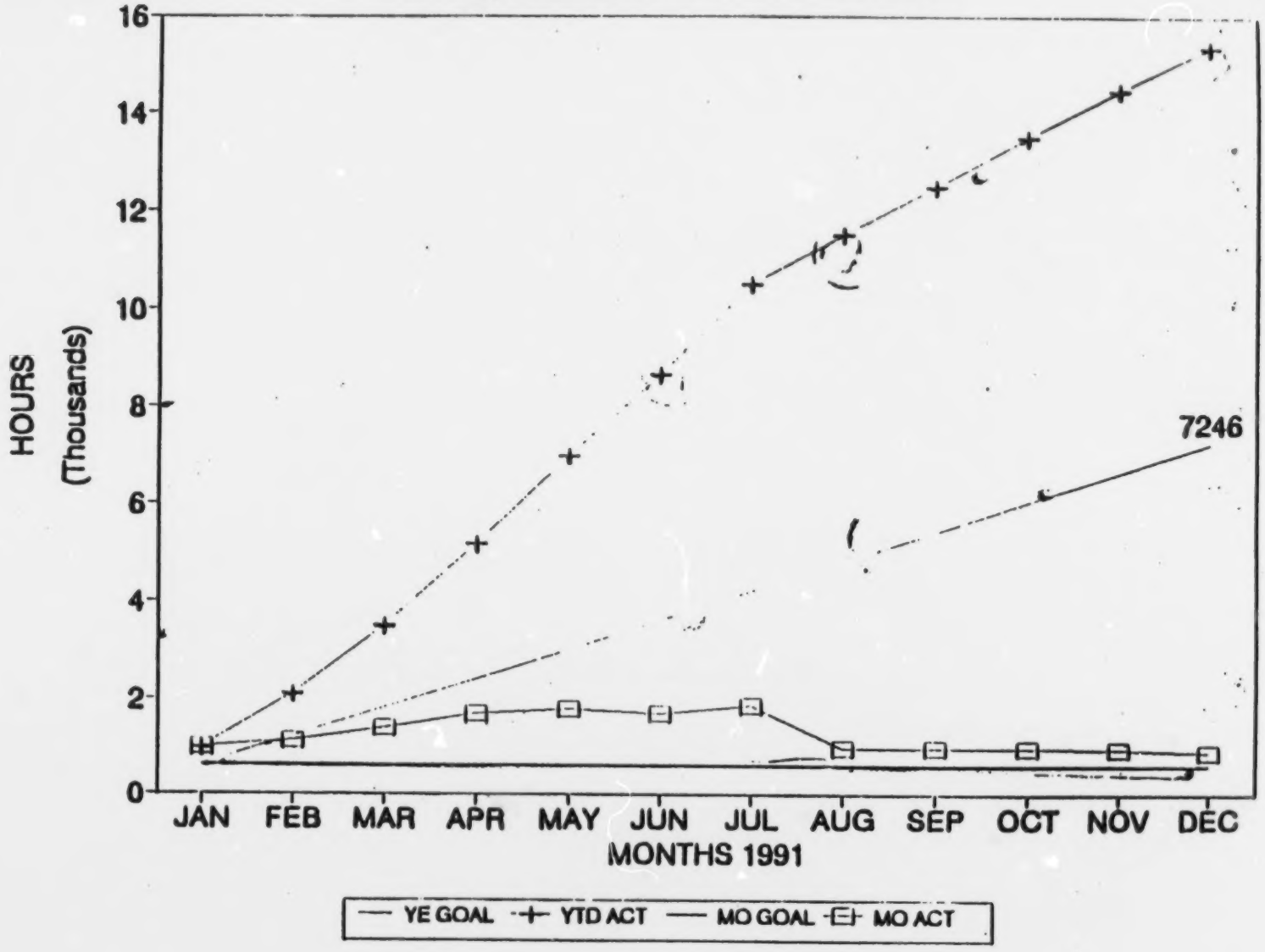
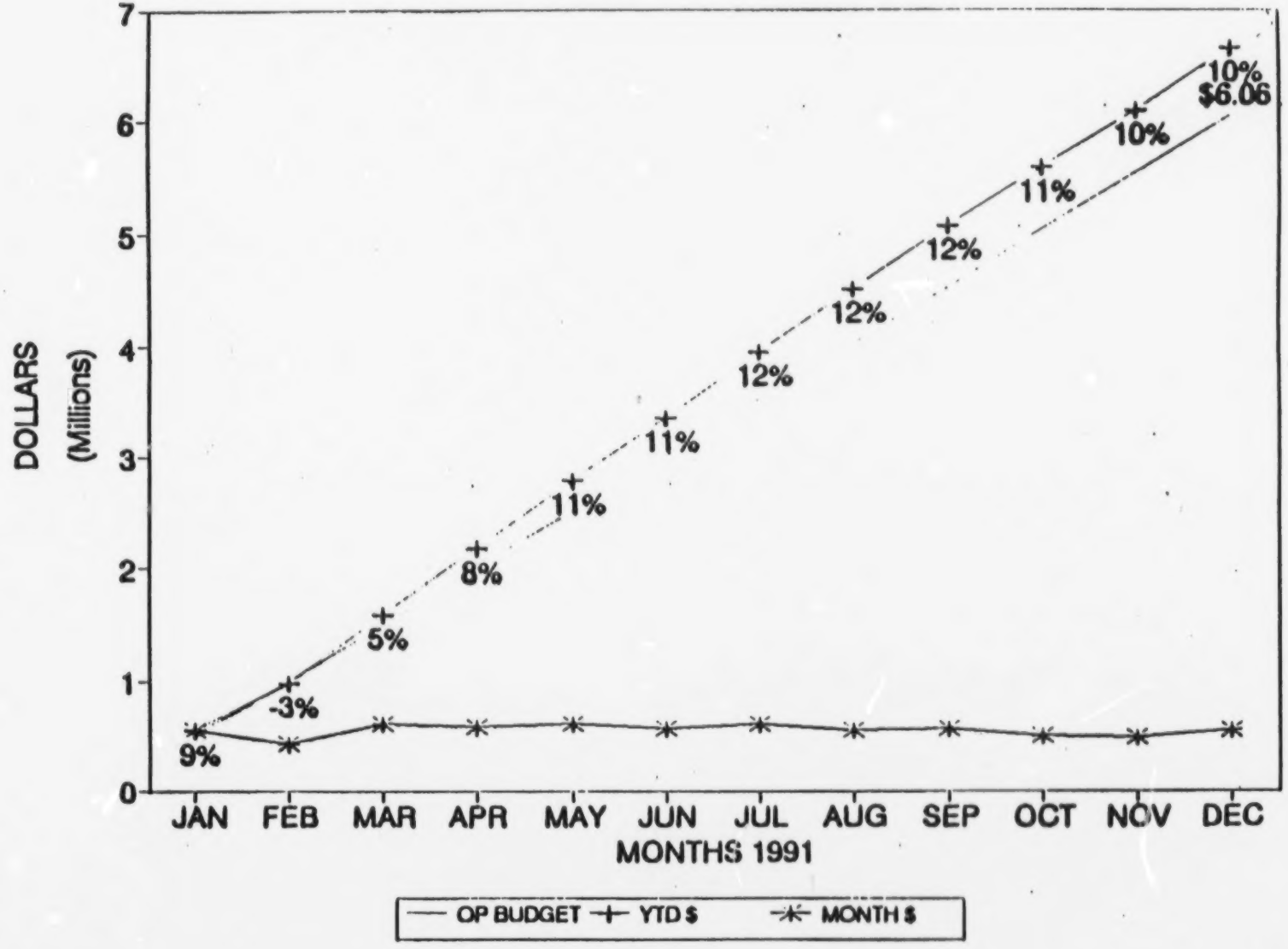
T3.5

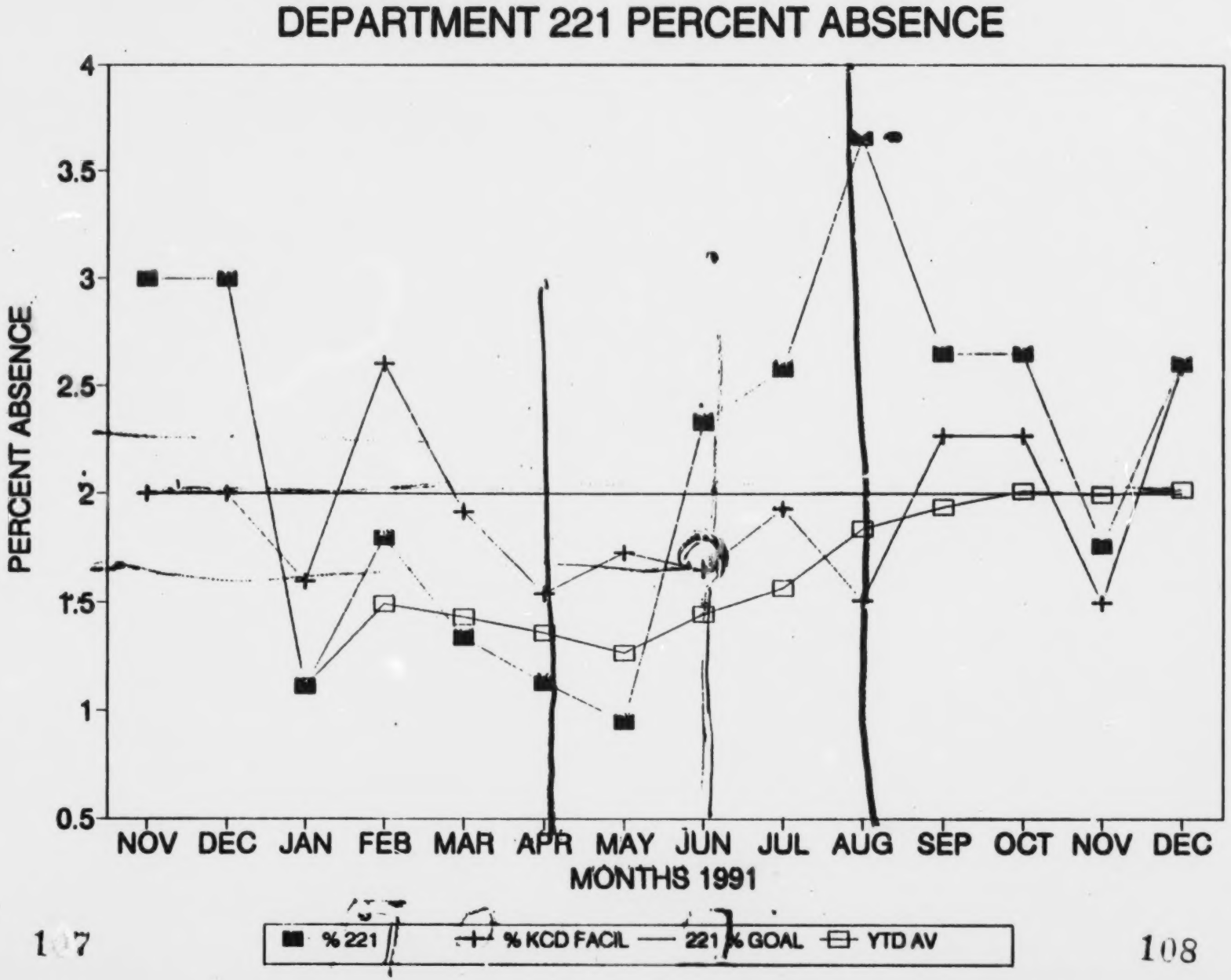
DEPARTMENT 221 OVERTIME



T3.6

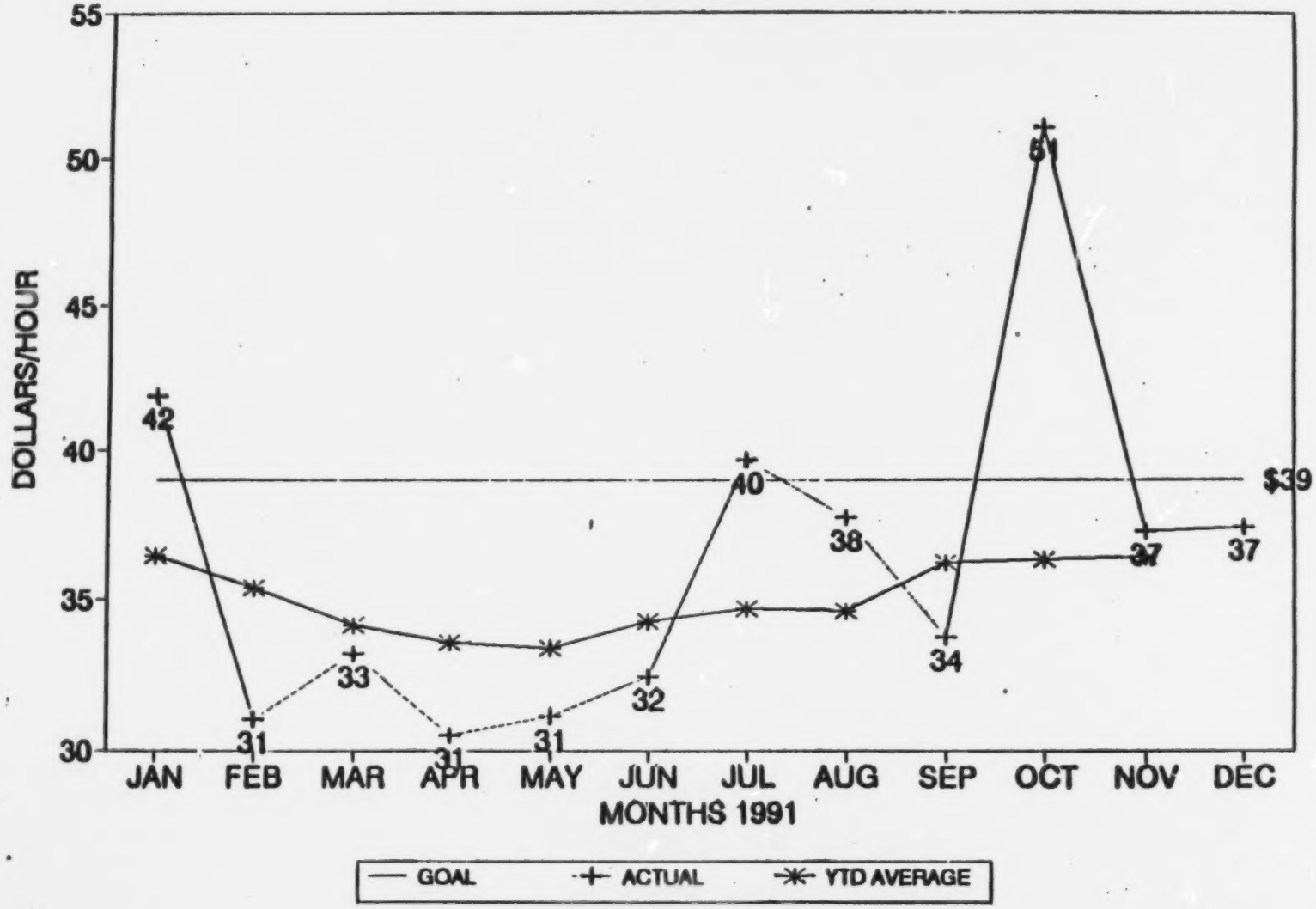
DEPARTMENT 221 BUDGET




DEPARTMENT 221 PERCENT ABSENCE
PERCENT ABSENCE
4
3.5
3
2.5
2
1.5
1
0.5
NOV DEC JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC
MONTHS 1991
% 221
% KCD FACIL
221 % GOAL
YTD AV

T3.10

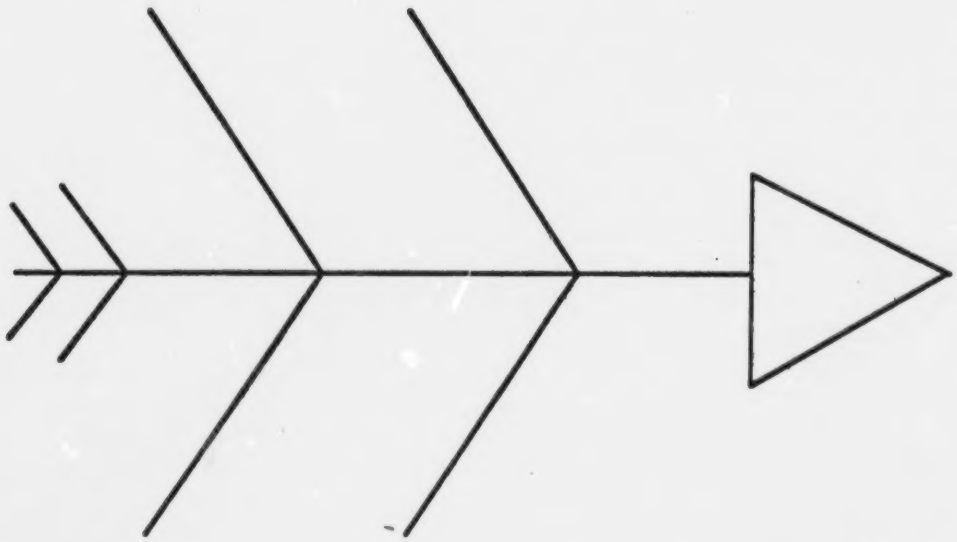
CHARGE RATE
DEPT 221



T3-11

T 3.12

Fishbone Diagram



T 3.13

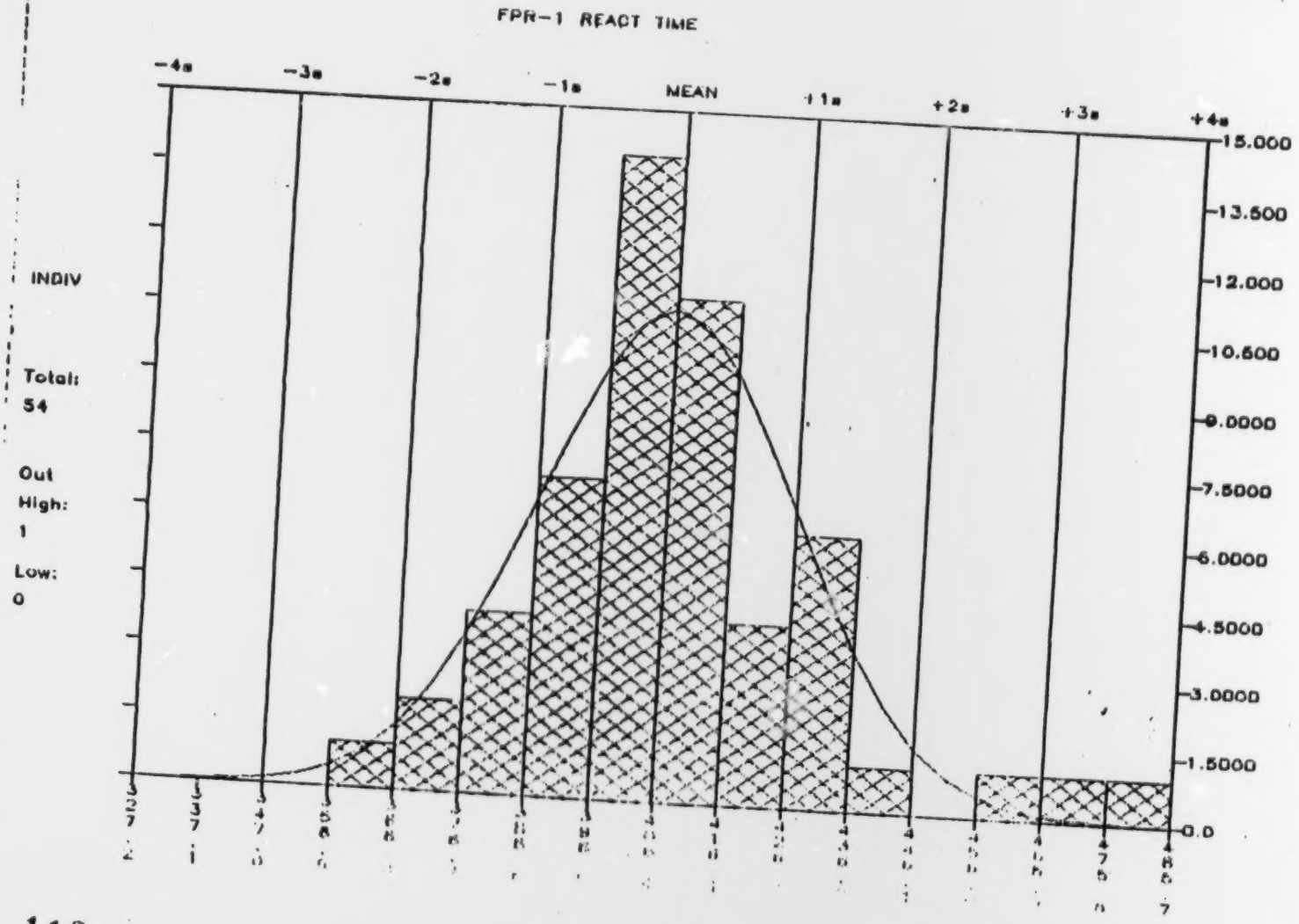
FLOW CHARTS

1. DECIDE ON START AND END POINTS FOR THE PROCESS.
   MARK WITH A CIRCLE

2. LIST EACH STEP IN THE PROCESS.
   MARK WITH A RECTANGLE.

3. IDENTIFY DECISION MAKING POINTS.
   MARK WITH A DIAMOND.

4. MARK THE DIRECTION OF PROCESS FLOW WITH ARROWS.



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USING AND UNDERSTANDING GRAPHICALLY DISPLAYED MATERIAL

Multiple Choice Choose the best answer from the selection given and write it on the line to the left

On pages 5-7 is a Material Safety Data Sheet for dichloromethane. Answer the following questions using this form:

___ 1. The chemical number(s) (Chem. No(s)) for dichloromethane is (are)
a. 342, 13022, 13055
b. CH2C12
c. 103 6532
d. 900342

___ 2. Safety precautions on the label for dichloromethane include all the following except
a. WARNING! HARMFUL IF INHALED
b. HARMFUL IF ABSORBED THROUGH SKIN
c. Wear safety goggles when handling
d. Keep container closed

___ 3. Special Fire Fighting Procedures state
a. stand at least five feet from flames
b. extinguish fire by smothering flames
c. wear self-contained breathing apparatus and protective clothing
d. extinguish with water spray or dry chemical CO2

___ 4. The health hazards include all except
a. upper respiratory tract irritation may result from exposure to high vapor concentrations
b. possible deafness with prolonged use
c. possible eye irritation
d. prolonged periods of exposure may result in burns

___ 5. The Ventilation and Personal Protection Section gives directions for the safe use of dichloromethane. Which of the following is not stated?
a. Protective gloves, clothing, and safety glasses or goggles should be worn.
b. A NIOSH-approved organic vapor respirator should be worn if needed.
c. Good ventilation should be used.
d. A hair cover should be worn.

___ 6. If a spill or leak occurs, the procedures include all except
a. keep from contact with oxidizing materials.
b. remove all sources of ignition.
c. small spills may be collected with absorbent material.
d. absorb material in vermiculite or other suitable absorbent and place in impervious container.

On page 8 is a line graph of the charge rate for Department 221.

___ 7. What was the charge rate in July 1991?
a. 40
b. $35/hour
c. $39/hour
d. $40/hour

___ 8. What was the year-to-date (YTD) average charge rate in November 1991?
a. 36
b. 37
c. $36/hour
d. $37/hour

___ 9. From May through September the year-to-date (YTD) average charge rate was
a. decreasing
b. increasing
c. remained steady or level
d. increased, then decreased

___ 10. In what month was the actual charge rate above the goal?
a. January
b. February
c. April
d. August

Use the fishbone diagram on page 9 to answer this question.

___ 11. Which of the following is true?
a. When a person is a leader it causes them to challenge the process.
b. Encouraging the Heart is more important than Modeling the way.
c. Inspiring a Shared Vision is one of the five qualities which results in leadership.
d. Enabling Others to Act is the least important thing a leader can do.

Construct a fishbone diagram showing the cause and effect of following the Ventilation and Personal Protection Section of the Material Safety Data Sheet for dichloromethane (pages 5-7).
12. 13. 14. 15.

Safety of Operators

A flow chart for Coating Alarm CAG/Flow Related (FOOC) is on page 10-11. Using the flow chart, answer the following questions.

___ 16. If the ADS flow is fluctuating and the FOOC is > ±1% from aim but the FOOC is <u>not</u> > ±2% from ain, then
   a. continue coating.
   b. follow minor standard action.
   c. check to see if FOOC is > ±3% from aim.
   d. check to see if FOOC is > ±10% from aim.

___ 17. From the decision diamond labeled FOOC > ±3% from aim you move to the rectangle labeled Follow Minor Standard Action. The problem has been found, but the flow is not stabilized. What do you do next?
   a. continue coating, procedure is completed
   b. continue coating, monitor flow, write DR
   c. notify E & M, adjust ECR pressure, follow the rest of Minor Standard Action
   d. put leader in at end of roll, notify E & M, write DR

___ 18. You are at the decision diamond labeled FOOC > ±10% from aim. You find that the hopper is out, the flow is stabilized, and there is no BDA activity. What do you do next?
   a. refer to BDA Activity CAG
   b. continue coating
   c. put hopper in
   d. leader in immediately

___ 19. The FOOC is not > ±2% from aim. The problem is not found and the flow is not stabilized. What do you do next?
a. continue coating, request E & M to determine if pump should be replaced, write DR
b. continue coating, monitor flow, write DR
c. put leader in at end of roll
d. find out if FOOC is > ±3% from aim

___ 20. The FOOC is > ±3% from aim but it is not > ±10% from aim. What do you do next?
a. check to see if the hopper is out
b. follow the minor standard action
c. put leader in immediately
d. notify winder with hopper out footage

MATERIAL SAFETY DATA SHEET

EASTMAN KODAK COMPANY
343 State Street
Rochester, New York 14650

For Emergency Health, Safety, and Environmental Information, call 716-722-5151
For other purposes, call 800-225-5352 (in New York State call 716-458-4016)

Revised Date of Preparation: 01/20/87 Kodak Accession Number: 900342

SECTION I. IDENTIFICATION

- Product Name: Dichloromethane
- Sizes: CAT 103 6532 - 4L/case; CAT 104 9204 - bulk; CAT 104 9329 - 1 kg; CAT 114 8790 - 500 mL; CAT 104 9634 - 4 kg; CAT 104 9675 - 5 gal; CAT 110 4157 - 4 X 1 gal; CAT 110 4173 - 5 gal; CAT 113 6688 - 20L; CAT 114 4609 - 20L; CAT 114 8824 - 4L; CAT 117 0471 - 500 mL; CAT 117 0620 - 4L; CAT 136 2698 - bulk; CAT 136 2706 - 1 pt; CAT 136 2714 - 1 gal; CAT 136 2722 - 5 gal; CAT 136 2730 - 12 x 1 pt; CAT 136 2748 - 4 x 1 gal; CAT 136 4041 - bulk; CAT 136 4058 - 12 x 1 pt; CAT 136 4066 - 4 x 1 gal; CAT 135 7685 - 500 mL/case; CAT 136 9318 - 4L/case; CAT 186 3869 - 1 pt; CAT 186 3927 - 1 gal; CAT 199 3864 - 500 mL/case
- Synonym(s): Methylene Chloride, Methylene Dichloride
- Formula: CH_2Cl_2
- Chem. No(s): 342, 13022, 13055
- Kodak's Internal Hazard Rating Codes: H: 2 S: 2 F: 2 C: 0

SECTION II. PRODUCT AND COMPONENT HAZARD DATA

A. COMPONENT(S):	Weight Percent	TLV(R)	Kodak Accession No.	CAS Reg. No.
Dichloromethane	GT 95	100 ppm	900342	75-09-2

B. PRECAUTIONARY LABEL STATEMENT(S):

WARNING!
HARMFUL IF INHALED
CAUSES SKIN AND EYE IRRITATION
HARMFUL IF ABSORBED THROUGH SKIN
Avoid contact with eyes, skin, and clothing.
Avoid breathing vapor.
Keep away from heat and flame.
Keep container closed.
Use only with adequate ventilation.
First Aid: In case of contact, immediately flush eyes or skin with plenty of water for at least 15 minutes. Remove contaminated clothing. Wash contaminated clothing before reuse. If inhaled, remove to fresh air. If not breathing give artificial respiration, preferably mouth-to-mouth. If breathing is difficult, give oxygen. Call a physician immediately.

SECTION III. PHYSICAL DATA

- Appearance and Odor: Colorless liquid; ethereal odor
- Melting Point: - 96.7 C (- 142.1 F)
- Boiling Point: 40 C (104 F) @ 760 mmHg
- Vapor Pressure: 350 mmHg @ 20 C
- Vapor Density (Air = 1): 2.9
- Volatile Fraction by Weight: 100 %
- Specific Gravity (H_2O = 1): 1.33
- Solubility in Water (by weight): Moderate
- Heat of Decomposition: - 0.25 kcal/g
- Heat of Combustion: - 1.26 kcal/g
- * Calculated by ASTM Program CHETAH.

SECTION IV. FIRE AND EXPLOSION HAZARD DATA

- Flash Point: None at standard equipment due to flame quenching.
- Flammable Limits in Air (% by volume in air): Lower 13.1 % at 103 C
  Upper 17.3 % at 148 C
- Extinguishing Media: Water spray; Dry chemical; CO_2
- Special Fire Fighting Procedures: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.
- Unusual Fire and Explosion Hazards: Fire or excessive heat may cause production of hazardous decomposition products. Has no flash point and will not "Pool" burn. However, vapors mixed with air in proper proportion will propagate a flame. In very large vessels vapor air mixtures will propagate a flame in the upward direction at ambient conditions. Mixtures with minimal percentages of flammable solvents are flammable.

SECTION V. REACTIVITY DATA

- Stability: Stable
- Incompatibility: Strong oxidizers, aluminum
- Hazardous Decomposition Products: Hydrogen chloride gas, carbon monoxide, carbon dioxide, phosgene gas
- Hazardous Polymerization: Will not occur.

SECTION VI. TOXICITY AND HEALTH HAZARD DATA

A. THRESHOLD LIMIT VALUE: 100 ppm TWA-8hr, (ACGIH, 1985-86)

B. EXPOSURE EFFECTS:

Inhalation: Harmful if inhaled. Exposure to high vapor concentrations may result in upper respiratory tract irritation and prolonged exposure may lead to loss of consciousness (anesthesia).

Eyes: Causes eye irritation. Possible transient corneal injury.

Skin: Causes irritation. If exposed to skin for prolonged periods, it may result in burns. Harmful if absorbed through the skin.

C. FIRST AID:

Inhalation: Remove to fresh air; if not breathing give artificial respiration, preferably mouth-to-mouth; if breathing is difficult, give oxygen. CALL A PHYSICIAN.

Eyes: Immediately flush eyes with plenty of water for at least 15 minutes and get medical attention.

Skin: Immediately flush skin with plenty of water for at least 15 minutes and get medical attention if symptoms are present after washing. Remove contaminated clothing and shoes. Launder contaminated clothing before reuse.

Note to Physicians: Methylene chloride can cause an increase in carboxyhemoglobin level. May cause myocardial irritability. Avoid epinephrine or similar drugs.

D. TOXICITY DATA:

Test	Species	Result	Classification(2)
Acute Oral LD50	Rat	800-1600 mg/kg(1)	Slightly toxic
Skin Absorption LD50	Guinea Pig	GT 20 ml/kg(1)	
Skin Irritation	Guinea Pig	Moderate irritation(1)	
Inhalation LC50	Rat	15,000 ppm/8 hrs(3)	
Intraperitoneal	Rat	412-930 mg/kg: Increased carboxyhemoglobin(4)	

The carcinogenicity of methylene chloride has been extensively investigated. An increase in the rate of spontaneously occurring lung and liver tumors in mice has been reported in a chronic inhalation study at exposure levels of 2000-4000 ppm.(5) An increase in spontaneously occurring benign mammary gland tumors in rats has also been reported in two chronic inhalation studies at exposure levels of 500-4000 ppm.(5,6) A follow-up chronic inhalation study in rats at exposure levels of 50-500 ppm did not show an increase in the number of animals with mammary gland tumors or tumors at other sites.(7) In addition, hamsters exposed by inhalation to levels up to 3500 ppm and rats and mice administered up to 250 mg/kg in the drinking water in chronic bioassays had no significant increase in tumor incidences.(6,8)
Human experience in the use of methylene chloride has generally been favorable.(3)

A historical cohort study of persons occupationally exposed to methylene chloride revealed no significantly increased cancer or ischemic heart disease mortality compared to a group of non-exposed employees.(1,9) A similar study in a different occupationally exposed group also failed to show any increase in cancers.(10)

The above studies have demonstrated an approximate no-effect level for benign tumors in rats at levels approximately five times greater than the present ACGIH TLV. Based on this information, as well as very favorable industrial handling experience, Eastman Kodak Company believes methylene chloride does not present a carcinogenic risk to humans at the present ACGIH TLV. Based on the ACGIH criteria for the classification of experimental animal carcinogens, methylene chloride would not be considered an occupational carcinogen of any practical significance.(11)

SECTION VII. VENTILATION AND PERSONAL PROTECTION

A. VENTILATION:
Good general ventilation* should be used. Local exhaust ventilation or an enclosed handling system may be needed to control air contamination below the TLV in certain operations.

*Typically 10 room volumes per hour is considered good general ventilation: Ventilation rates should be matched to conditions of use.

B. RESPIRATORY PROTECTION:
A NIOSH-approved organic vapor respirator should be worn if needed. If respirators are used, a program should be instituted to assure compliance with OSHA standard 29CFR 1910.134.

C. SKIN AND EYE PROTECTION:
Protective gloves, clothing, and safety glasses or goggles should be worn.

SECTION VIII. SPECIAL STORAGE AND HANDLING PRECAUTIONS

Keep away from heat and flame.
Keep from contact with oxidizing materials.
Loosen closure cautiously before opening.
Do not store in aluminum containers.

SECTION IX. SPILL, LEAK, AND DISPOSAL PROCEDURES

Remove all sources of ignition.
Prevent run-off from entering drains, sewers, and streams.
Small spills may be collected with absorbent material.
Absorb material in vermiculite or other suitable absorbent and place in impervious container.
Dispose in incinerator equipped with afterburner and scrubber or contract with licensed chemical waste disposal service.
Discharge, treatment, or disposal may be subject to federal, state, or local laws.

SECTION X. ENVIRONMENTAL EFFECTS DATA

A. SUMMARY:

Data for this material (1,12-18) have been used to evaluate the following properties and provide the following estimate of environmental impact: this material has no biochemical oxygen demand and no potential to cause oxygen depletion in aqueous systems. It has a moderate potential to affect some aquatic organisms, resistance to biodegradation, a low potential to persist in the aquatic environment, and a low potential to bioconcentrate. The direct instantaneous discharge to a receiving body of water of an amount of this material, which will rapidly produce by dilution a final concentration of 70 mg/L or less, is not expected to cause adverse environmental effects.

B. OXYGEN DEMAND DATA: COD: 0.02 g/g; ThOD: 0.37 g/g; BOD5: 0.00 g/g(1)

C. ACUTE AQUATIC EFFECTS:
96-h EC50 (loss of Equilibrium); Fathead minnow: 99 mg/L; 96-h EC10: 66.3 mg/L(12)
96-h LC50; Fathead minnow: 193 mg/L (Flow through test); 310 mg/L (Static test)(12)
96-h LC50; Bluegill sunfish: 220 mg/L(13)
48-h LC50; Golden orfe (minnow): 521 mg/L; 528 mg/L(14)
96-h LC50 Sheepshead minnow: 330 mg/L(15)
48-h Lc50; Water flea: 220 mg/L; No observed effect level: 68 mg/L(16)
24-h LC50; Water flea: 2270 mg/L; No observed effect level: 1550 mg/L(17)

D. BIOCONCENTRATION POTENTIAL:
Octanol/Water Partition Coefficient: Log P = 1.25; P = 18(18)

SECTION XI. TRANSPORTATION

For transportation information regarding this product, please phone the Eastman Kodak Distribution Center nearest you: Rochester, NY (716) 254-1300; Oak Brook, IL (312) 654-5300; Chamblee, GA (404) 455-0123; Dallas, TX (214) 241-1611; Whittier, CA (213) 945-1255; Honolulu, HI (808) 833-1661.

SECTION XII. REFERENCES

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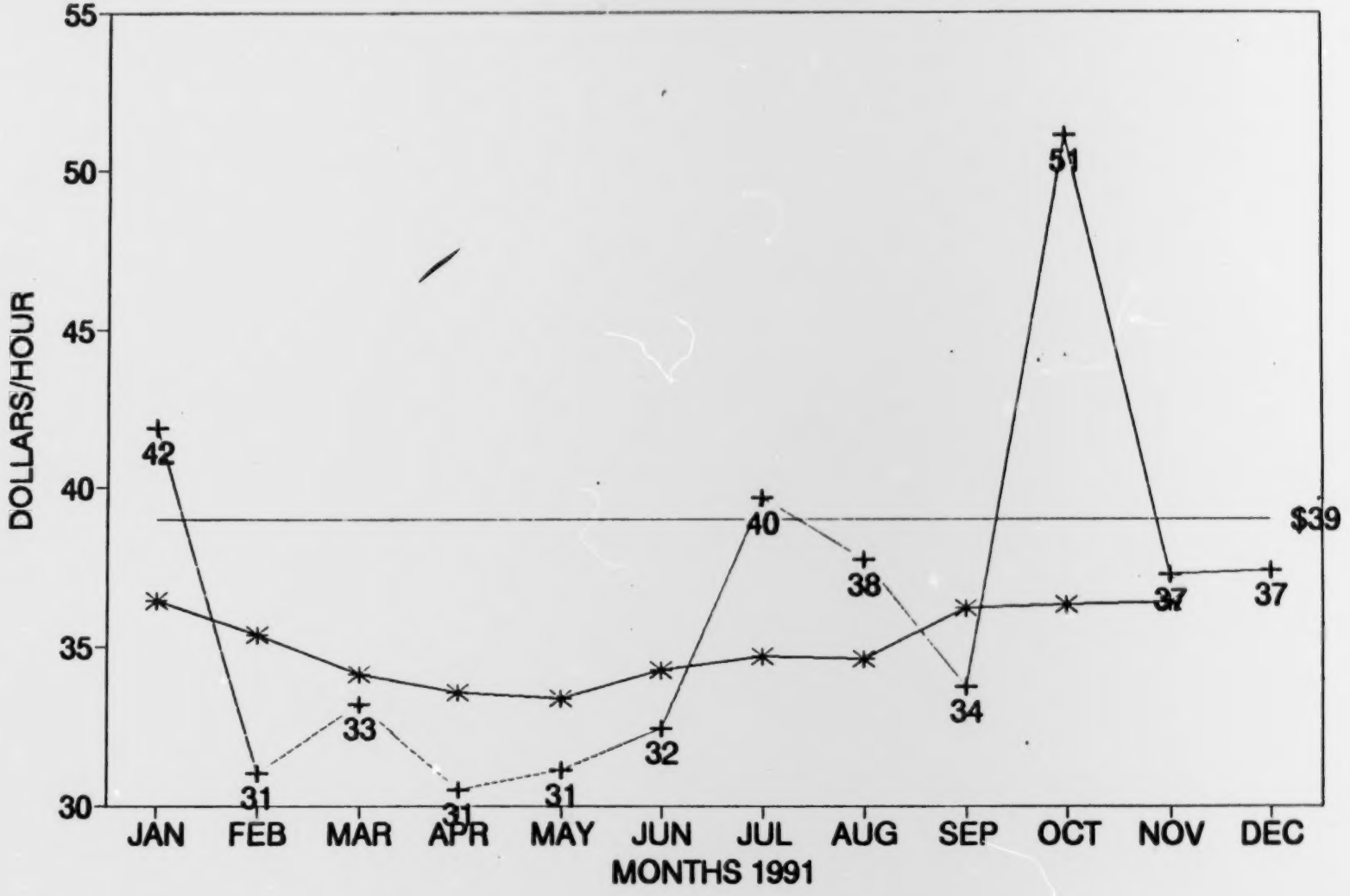
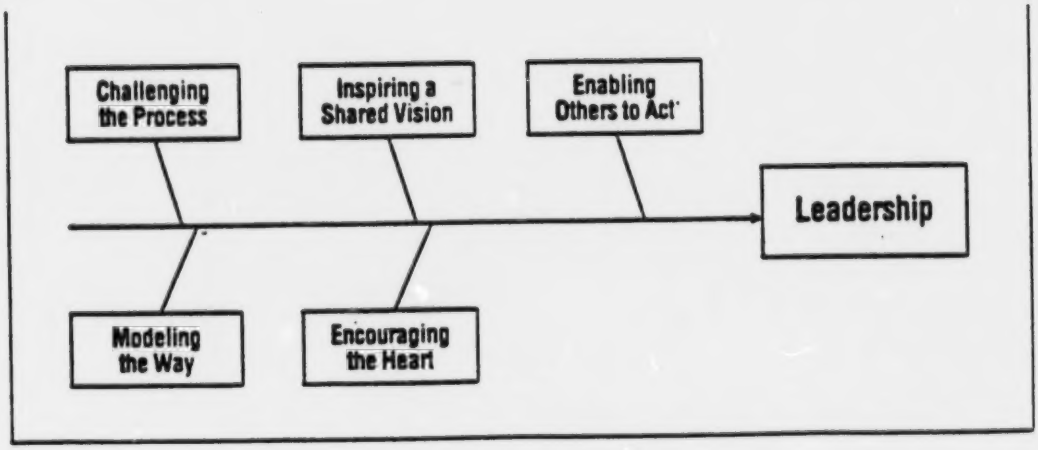
DEPT 221



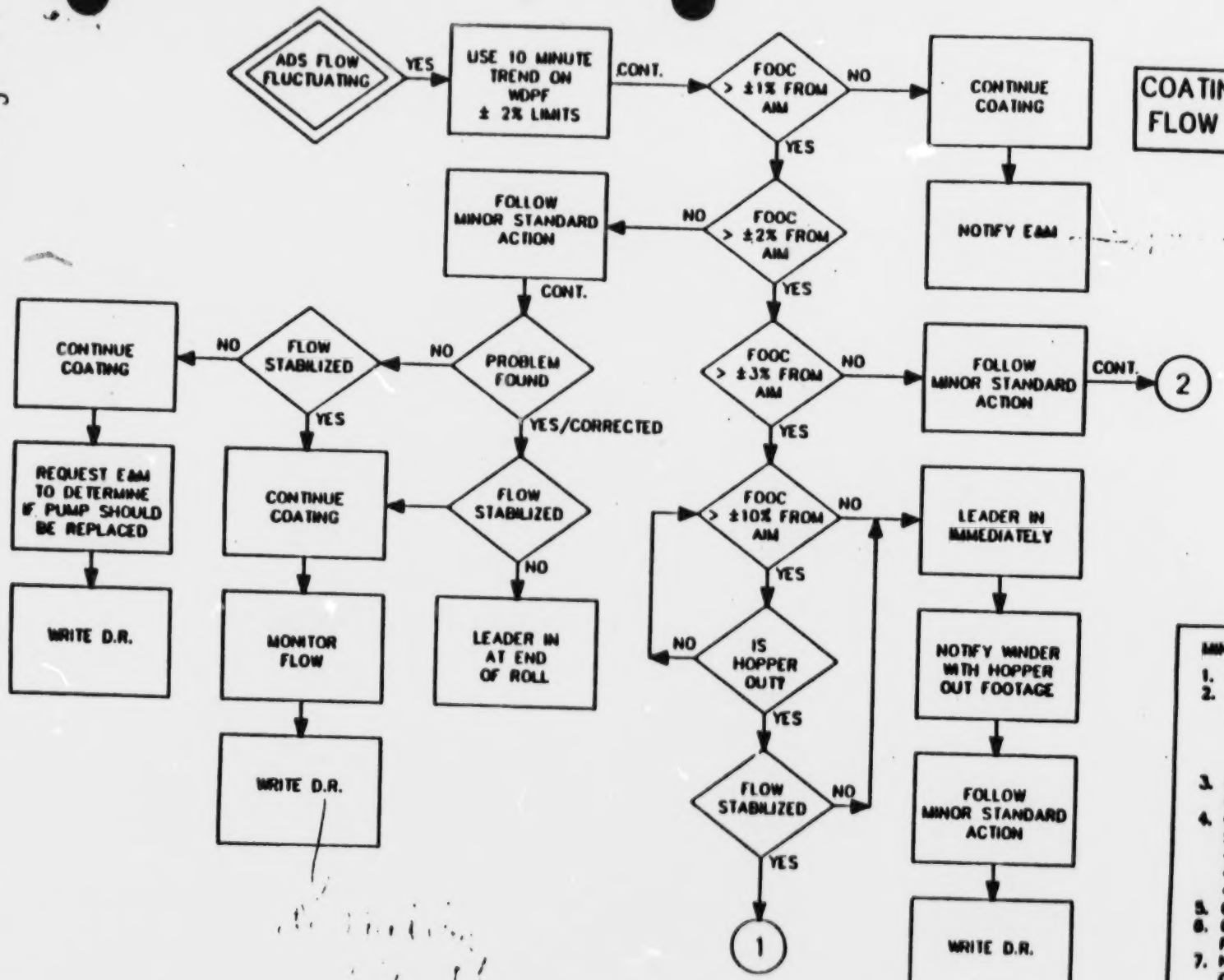
LB 3.11


Challenging the Process
Inspiring a Shared Vision
Enabling Others to Act
Leadership
Modeling the Way
Encouraging the Heart

27

COATING ALARM CAG/ FLOW RELATED (FOOC)

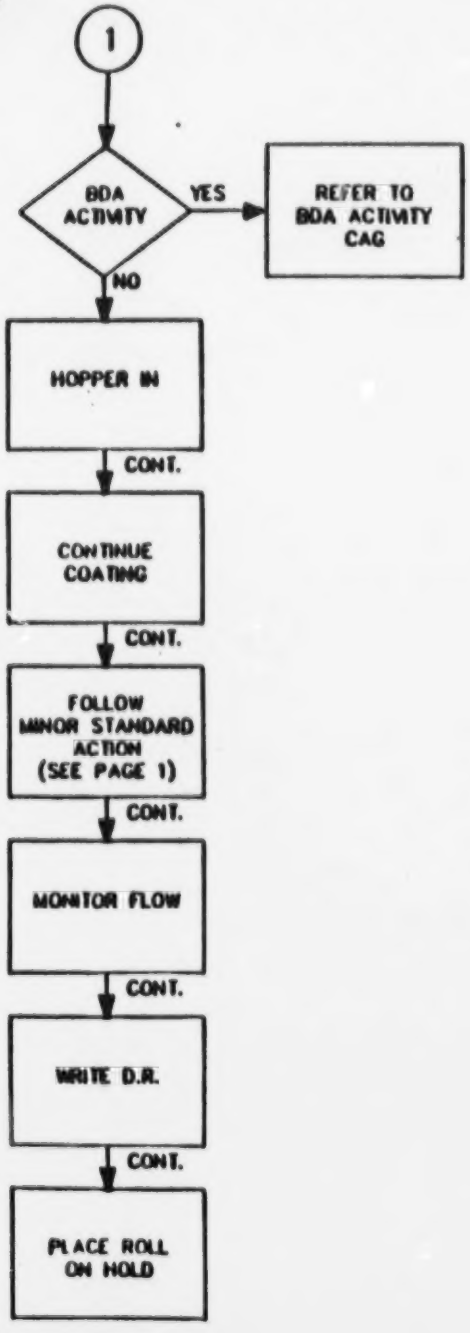
PAGE 1



MINOR STANDARD ACTION:

1. NOTIFY E&M.
2. ADJUST ECR PRESSURE.
   2.1 PRESSURE MAY BE RAISED OR LOWERED TO AFFECT A CHANGE IN FLOW STABILITY.
3. CHECK CVD DELTA T AND CVD LEVEL LIGHT.
4. CONTACT MELTER ON SYSTEM FOR ANY PROBLEMS
   4.1 CRACKED FILTERS.
   4.2 MELT CHANGES.
   4.3 CHECK FOR LEAKS.
5. CHECK 2ND MEZZ.
6. CHECK BEAD OR CURTAIN FOR IMPERFECTIONS.
7. NOTIFY WRCT OF POSSIBLE COATING IMPERFECTIONS.

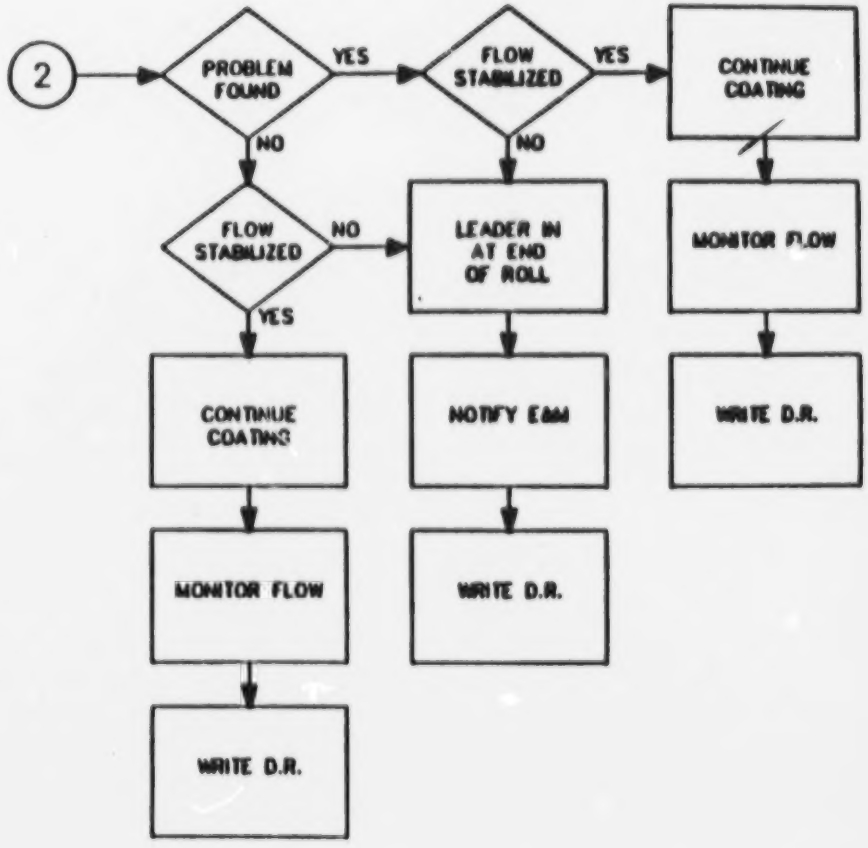
Rev 11
Page 11



LB 3.3.1

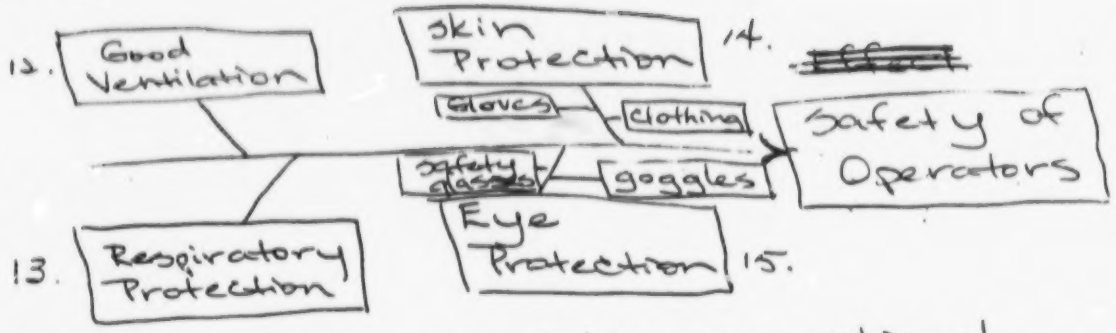
COATING ALARM CAG/ FLOW RELATED (FOOC)

PAGE 2



LB 3.32 Answer sheet

1. a
2. c
3. c
4. b
5. d
6. a
7. d
8. c
9. b
10. a
11. c



The smallest rectangles are optional.

16. b
17. d
18. c
19. a
20. c

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KODAK SKILLS ENHANCEMENT PROGRAM

APPLYING WRITTEN INFORMATION IN THE WORKPLACE

MODULE 4: Reading For Literal and Inferred Information

Objective: To apply written information by understanding literal and implied main ideas and supporting details.

Background: Analytical reading includes the ability to combine literal and implied information by using the written material, previous experience, knowledge and intuition. Printed job materials require these kinds of skills from workers.

INTRODUCE OBJECTIVES/CONCEPTS

Present Objectives T4.1 (LB 4.1)

Define Concepts--ask each participant to tell, briefly, something they did last week. After each description, ask the other participants to say if the described activity was enjoyable or not. As the discussion progresses, point out to participants that they are making their statements based on both literal and inferred information. With the inferred information, ask them how they knew and record the responses. Show T4.2 and discuss the concepts.

T4.2 (LB 4.2)

Background Instruction/Modeling T 4.3 (LB 4.3)

Show T 4.3 and ask participants to read and for and ask them questions which they can answer literally and other questions in which they have to infer answers.

Ask participants to say how they were able to come up with the answers for which no literal information was available and list on a flipchart.

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Group practice T 4.4-4.7
LB 4.4-4.7

After practice, ask the participants when they have

had to use inferencing skills when reading and performing workplace information.

Individual practice

LB 4.8-4.12

Ask participants to practice getting implied and literal information and answer the questions accordingly. Report out to the large group.

Review concepts